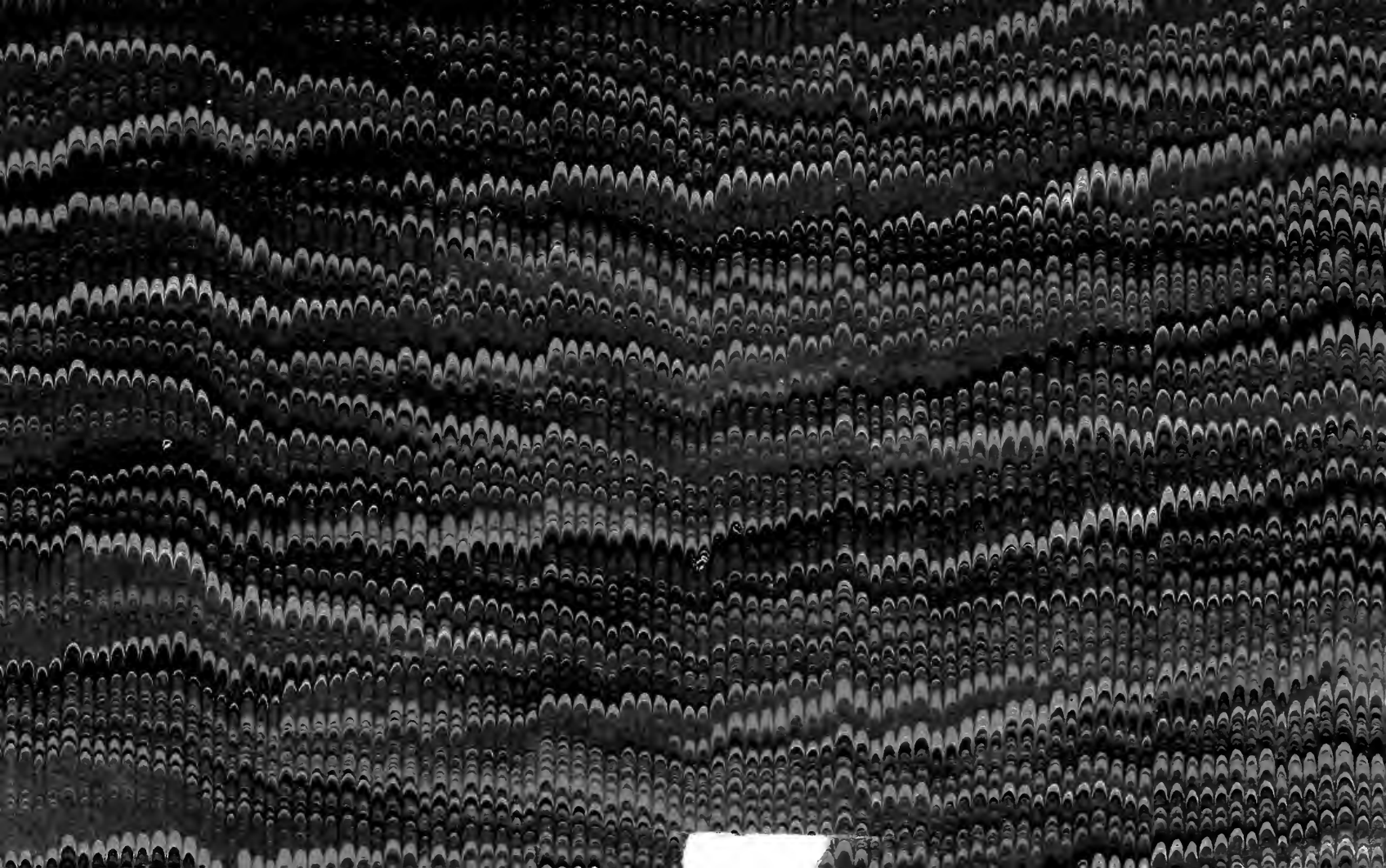
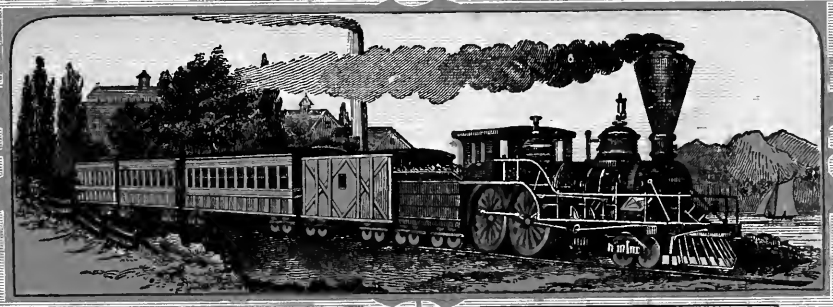


Panoramic View

Of The

Cincinnati Southern



Railway.

Cincinnati to Chattanooga.

Cincinnati, O.

Spencer & Craig Printing Works.

DESCRIPTION

OF THE

Cincinnati Southern Railway

FROM CINCINNATI TO CHATTANOOGA.

ILLUSTRATED.

GIVING ITS HISTORY AND A GENERAL DESCRIPTON OF THE

TOWNS AND VILLAGES,

BRIDGES, TUNNELS, &c.

THROUGH WHICH IT PASSES; DESCRIPTION AND RESOURCES OF THE COUNTRY, AND A GENERAL

GUIDE TO BUSINESS HOUSES

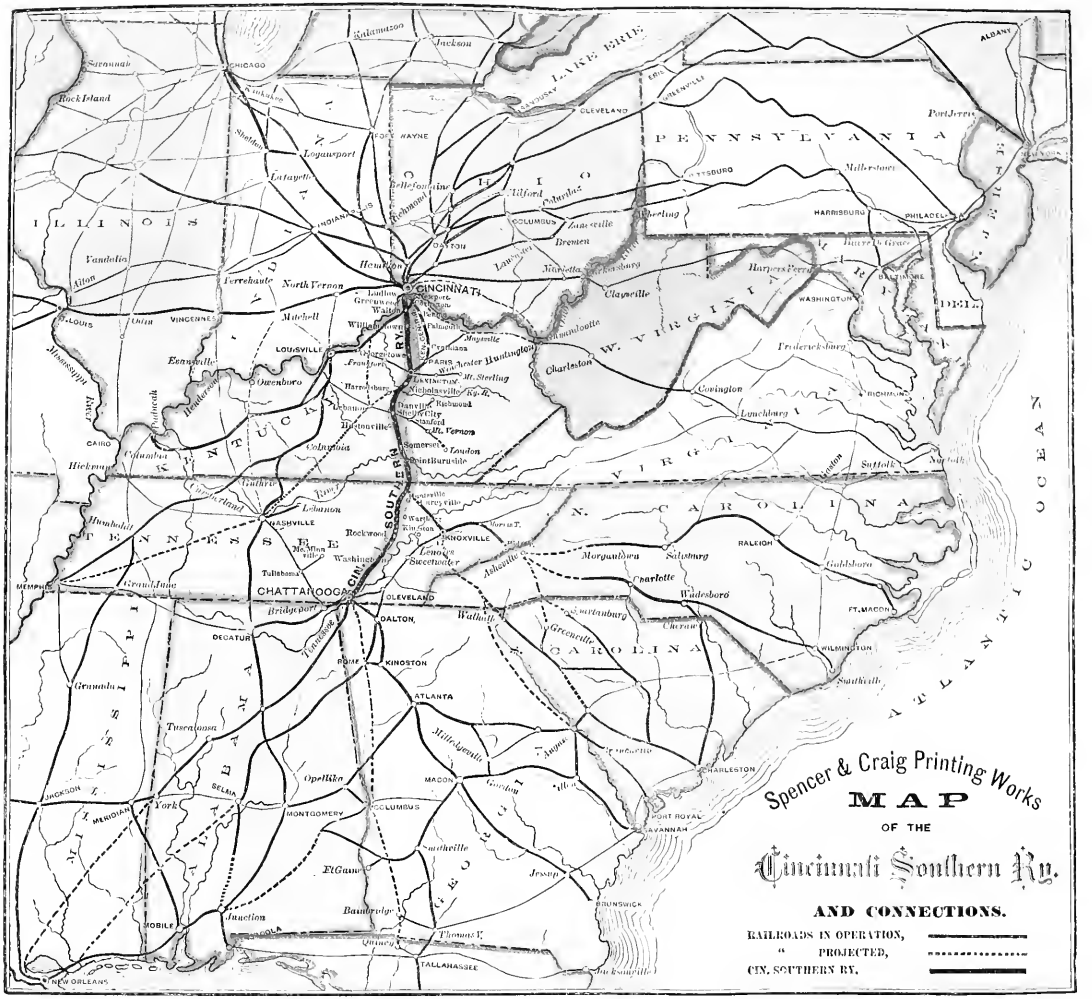
AND PLACES OF INTEREST IN CINCINNATI,

AND POINTS ON THE

SOUTHERN RAILWAY.

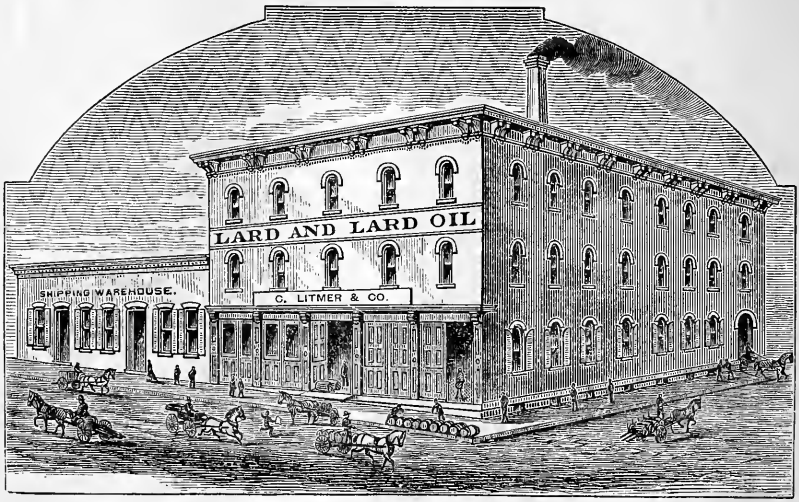
ARRANGED AND COMPILED BY Z. HARRISON.

CINCINNATI:
SPENCER & CRAIG PRINTING WORKS, 169 AND 171 RACE STREET,
1878.


Spencer & Craig Printing Works
MAP
OF THE
Cincinnati Southern Ry.
AND CONNECTIONS.
RAILROADS IN OPERATION,
" PROJECTED,
CIN. SOUTHERN RY.
CINCINNATI
CHATTANOOGA
ATLANTA
LOUISVILLE
NASHVILLE
KNOXVILLE
CHARLESTON
SAVANNAH
MOBILE
MONTGOMERY
ATLANTIC OCEAN
LAKE ERIE
PENNSYLVANIA
VIRGINIA
N. CAROLINA
S. CAROLINA
GEORGIA
ALABAMA
TENNESSEE
KENTUCKY
ILLINOIS
INDIANA
OHIO

C. LITMER & CO.,

MANUFACTURERS OF



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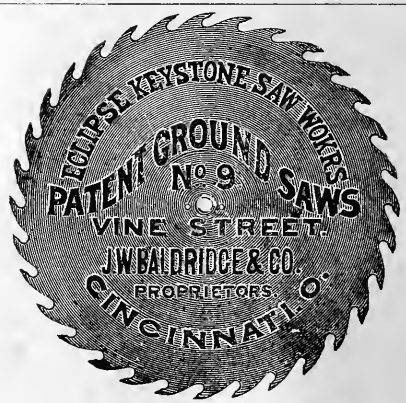

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N. E. COR. PLUM & LONGWORTH STREETS,

Cincinnati, Ohio.

PREFACE.

THE opening of the CINCINNATI SOUTHERN RAILWAY marks an epoch in the history of Cincinnati, the magnitude of which is not fully realized. We compute in figures the *enormous cost of the road* but overlook the *immense developments* being made by this grand highway of public travel. In Ohio and Indiana on the north and leading directly to Cincinnati, are 6,000 miles of railway, south of Tennessee and converging there are 4,000 miles; and this railway will be as the neck between them. It is estimated that the extent of country which will thereby become a market for our manufactures, and from which we shall draw its special products, embraces an area of about 200,000 square miles, equal to four times the State of New York. In this vast territory there are a number of cities and large towns with no eastern or northern city so accessible as Cincinnati.

We have undertaken to collect and arrange from statistics and various other authentic sources, a brief but interesting history of Cincinnati, the Cincinnati Southern Railway and notable points on its line. We have quoted freely from Mr. Collins' excellent work on Kentucky, J. B. Killebrew's "Resources of Tennessee," and from various reports, &c., issued by the Board of Trustees.

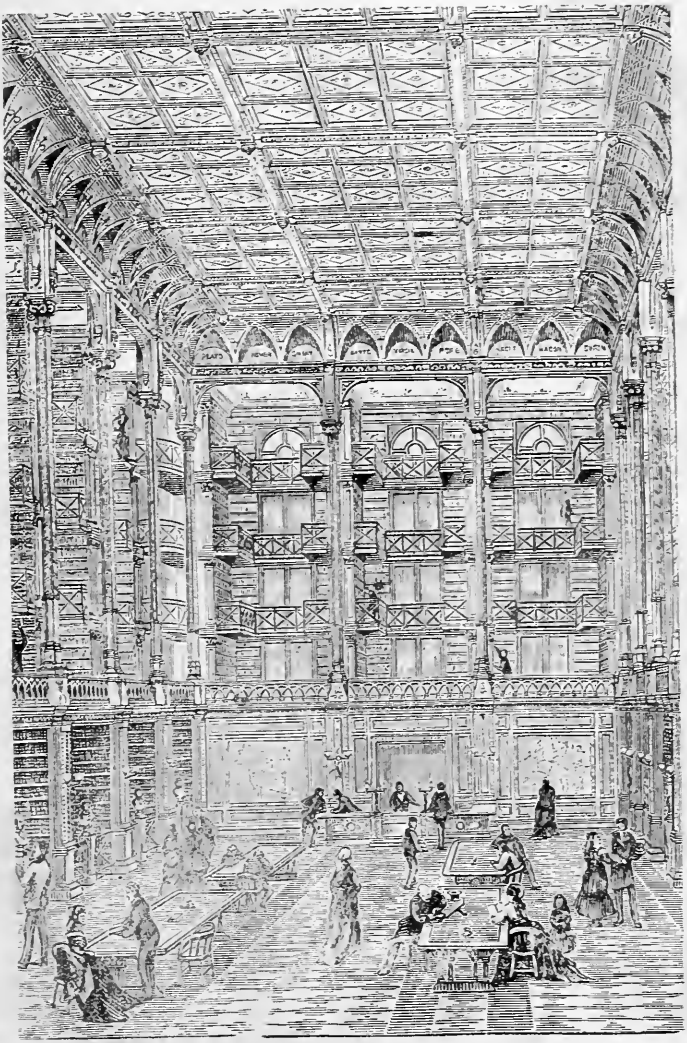
We have embellished the work with numerous illustrations and engravings of places of interest in Cincinnati, and along the route.

The frequent delays caused by the want of prompt legislation and the heavy character of construction, have combined to postpone the completion of the road. On this account we have delayed the publication of our work until the question should be definitely decided, and work under way.

Believing that a great want has been met, we submit this work to the public.

SPENCER & CRAIG.

CINCINNATI, *May* 1, 1878.



PUBLIC LIBRARY.

INTRODUCTORY.

A railway from Cincinnati to the South was at first proposed as an outlet from the Ohio Valley to the south-eastern Sea-board. Two large systems of railroads have grown up in the South, that of the south-eastern Sea-board, taking very naturally, a north-westerly course, and the Gulf system, bearing quite as generally to the north-east, thus converging upon East Tennessee. It was therefore determined by the City of Cincinnati, after a full investigation in the summer of 1869, to build a TRUNK LINE OF RAILROAD from this city to Chattanooga, in order to make connections with both of these systems of railroads and open up as much of THE INTERIOR SOUTHERN COUNTRY as possible by any single line of road, and reach both the Sea-board and Gulf by direct routes.

The General Assembly of the State of Ohio, on the 4th of May, 1869, passed an act authorizing the construction of a railway by the city, through a Board of Trustees, between two termini, one of which should be Cincinnati, the other to be named by the City Council, which designated Chattanooga. Said trustees were empowered to borrow a fund for the purpose, and to issue bonds therefor, in the name of the city, not to exceed ten millions of dollars, with ample power as to the time and place of payment. Said bonds to be secured by a mortgage on the line of railway and its net income, and by a pledge of the faith of the city, and a tax, which it is made the duty of the City Council to *levy annually*, sufficient with its net income to pay the interest and provide a sinking fund for the final redemption of its bonds. A provision of the act above named, required that the question of constructing the railway and the issue of bonds for the purpose, should be submitted to the qualified electors of the city, and that a majority should decide. In conformity, a special election was held on the 26th of June, 1869, whereat were cast 15,435 ballots in favor of providing said line of railway on the part of the city, and 1,500 ballots against providing the same. This heavy majority bore testimony to the enterprise and daring spirit characteristics of our Queen City. At a subsequent election, the Trustees were authorized to increase the issue of bonds to sixteen millions, so that the total municipal debt, authorized and incurred, for the construction of the Cincinnati Southern Railroad, is $16,000,000—and was created by the issue of city bonds as follows:

SEVEN PER-CENT CURRENCY COUPON.

500 of $1000 each, - - - - - - - - - -	$500,000
400 " 500 " - - - - - - - - - - -	200,000
Total	$700,000

These bonds are dated July 1st, 1872, payable in thirty years—July 1st, 1902 at the American National Bank, New York, Interest Coupons, seven per cent, payable at the same place, semi-annually, on 1st day of January and July.

SEVEN THREE-TENTH PER-CENT CURRENCY COUPON.

$12,100,000 of $1,000 each, $12,100,000. Of these bonds $9,300,000 are dated July 1st, 1872, payable in thirty years, *i. e.*—July 1st, 1902, at the American Exchange National Bank, New York. Interest Coupons (7 3-10 per cent,) payable at same place, semi-annually, on 1st day of January and July. $2,800,000, are dated May 1st, 1876, payable in thirty years, *i. e.*—May 1st, 1906, at same bank. Interest Coupons, (7 3-10 per cent,) payable at same place, semi annually, on 1st day of May and November.

SIX PER-CENT GOLD COUPONS.

$3,200,000, of $1000 each, American Gold or £200 sterling—rating $5.00 gold to each £1 sterling. These bonds are dated May 1st, 1876, and payable in thirty years, *i. e.*—May 1st, 1906, at American Exchange National Bank, New York, or in London, England. Interest Coupons, (6 per cent, each $30.00, American Gold, or £6 sterling,) payable semi-annually, at either of said places on 1st day of May and November.

The ready sale of these bonds above par, showed the good standing of our credit both at home and abroad.

Agreeable to one of the provisions of the "Act of 1869," and the election of June, 26, 1869, the Superior Court of Cincinnati, appointed Richard M. Bishop, Edward A. Ferguson, Miles Greenwood, Philip Heidelbach and William Hooper, to be Trustees of the Cincinnati Southern Railroad, with the powers given in the act aforesaid, and ordered that the said Trustees severally enter into bond to the city of Cincinnati, in the sum of one hundred thousand dollars, with four sureties each, to be approved by the Court, conditioned for the faithful discharge of their duties. (June 30th, 1869.)

On the third day of July, 1869, the Trustees of the Cincinnati Southern Railway presented their said bonds with the following named persons:

1.—As sureties for Richard M. Bishop, as Trustee aforesaid; Carlos H. Gould, William S. Dickinson, James A. Frazer and Wm. Glenn.

2.—As sureties for Edward A. Ferguson, as Trustee aforesaid; Charles W. West, Anthony D. Bullock, Henry Lewis, and John Schiff.

3.—As sureties for Miles Greenwood, as Trustee aforesaid; Robert Mitchell, Lewis Worthington, William Woods, Joseph C. Butler and Peter Gibson.

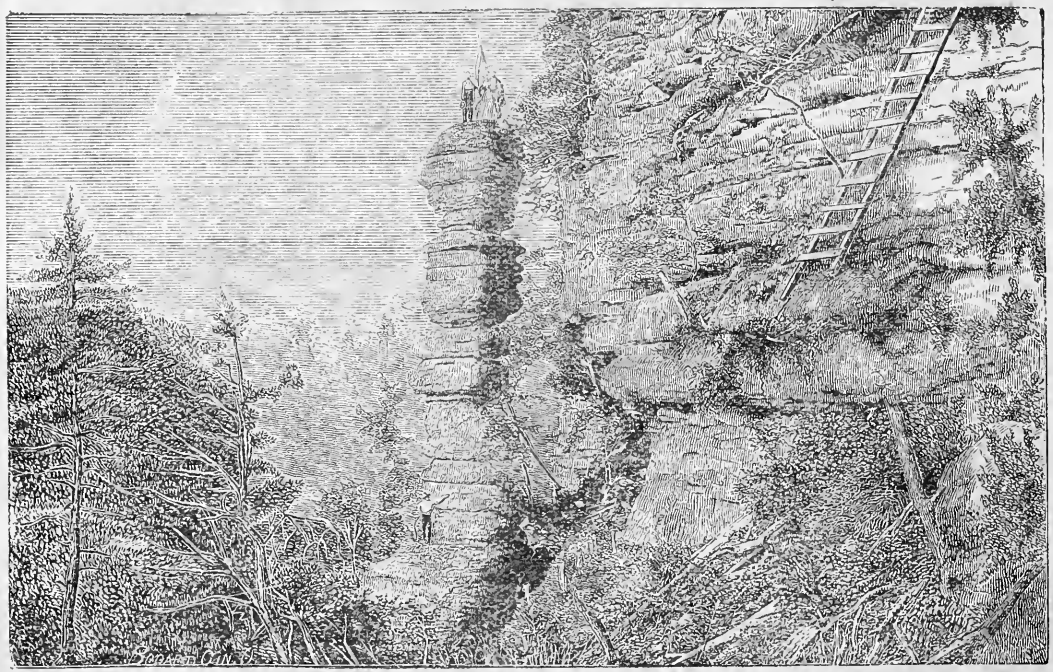
4.—As sureties for Philip Heidelbach, as Trustee aforesaid; Jacob Seasongood, Jacob Elsas, Abram Akerland, and Samuel Thorner.

5.—As sureties for William Hooper, as Trustee aforesaid; Learner B. Harrison, Leverett G. E. Stone, David H. Taylor, and Thomas R. Biggs.

These bonds were all approved by the Court and deposited with the city Treasurer. After which the said Trustees appeared in open court, and were duly sworn to discharge their duties as Trustees as aforesaid.

ORGANIZATION OF THE BOARD.

The Trustees met on the 6th of July, 1869, and chose Miles Greenwood, PRESIDENT, and appointed Henry H. Tatem, SECRETARY. They ordered that their office be kept at the rooms of the Board of trade of Cincinnati, in Pike's Opera House Building, and that their regular meetings be held on the first



CHIMNEY ROCK, KENTUCKY RIVER.

Tuesday of each month, at 3 o'clock P. M. The office was subsequently removed to No. 70, West Third street, Cincinnati, where was also established the Engineer's office, and that of Secretary, Auditor, and everything pertaining to the road, with the exception of the attorneys.

Instead of giving a lengthy and tedious account of the construction of the "Southern Railway," we will give a few of the more important events connected therewith.

The Board of Trustees first appointed William A. Gunn, as Chief Engineer, who was afterward superseded by Thomas D. Lovett, who was followed by G. Bouscaren the present engineer.

Since the beginning of the work of construction, December 12th, 1873, when the first contract for the grading and masonry of Sections 57 and 58, Division D, was awarded, including King's Mountain Tunnel. 253 contracts have been awarded by the Board of Trustees. With a very few exceptions, they are now all completed, (Dec. 1, 1877,) giving the following result:

The grading and masonry from Cincinnati to Boyce's Station, five miles east of Chattanooga, a distance of 331 3-10 miles, has been finished, including 27 tunnels, aggregating in length 4.99-100 miles. 7,722 lineal feet of wooden trestle work, 648 lineal feet of wooden bridges, 1,745 lineal feet of wooden highway bridges, 6,165 lineal feet of iron viaducts, and 5,305 lineal feet of iron bridges, including the structures over the Ohio, the Kentucky, and the Cumberland rivers, have been built.

Five spans of the Tennessee river bridge are erected, and the others in progress of manufacture. An inclined plane to the Ohio river, at Ludlow, has been built.

161 miles of main track and over fifteen miles of siding have been laid, and 118 miles more ready to lay, the rails and ties being on the ground.

Twelve locomotives and 428 cars are running on the road.

Water and fuel stations, passenger and freight depots, engine houses and turntables, platforms, cattle pens, and other commodities for the local operation of the railway, from Cincinnati to Somerset, a distance of 159 miles have been built and the first two operating divisions of the railway have been opened to local traffic, July 23, 1877, by a determinable license granted by the Board of Trustees, to the Cincinnati Southern Railway Company.

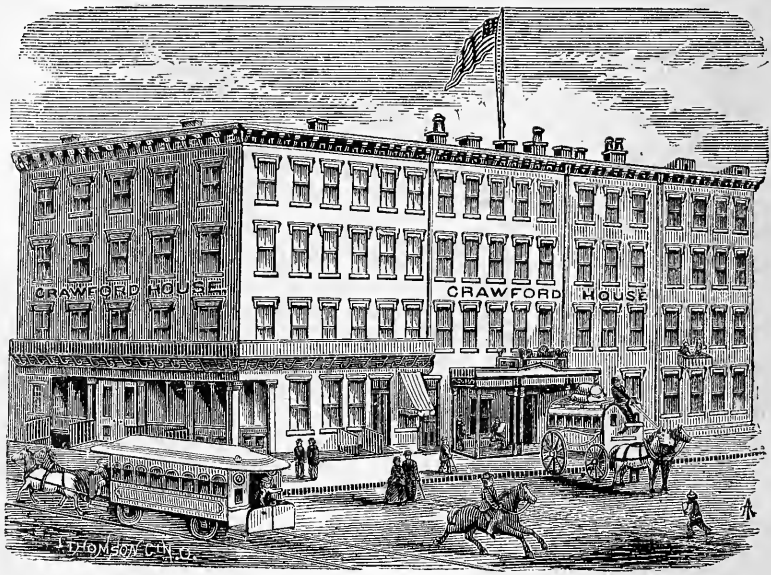
The construction account from December 12th, 1873, (the beginning of work) to December 1st, 1877, a period of nearly four years, shows the following amounts to have been expended, viz:

Grading and masonry	$10,252,588.36
Tunneling,	1,479,642,02
Bridges and Drains	2,418,657,15
Engineering,	676,058,91

The character of the work being unusually heavy on the Cincinnati Southern Railway, including, as it does, a very great percentage of tunneling and bridging, and on account of the excellent quality of the work done by contract on the road, the "sixteen millions" of dollars loaned by the city of Cincinnati, have proven inadequate for the completion of the road, although the above amount has been swelled somewhat by donations and land grants along the road. Consequently the Board of Trustees are seeking legislation for the further issue of two millions of dollars in bonds.

Judging from past estimates and taking into consideration the immense wear of the unfinished road-bed by the "elements," this amount would seem very low, and policy should dictate a larger sum; to hasten the work and enable the city of Cincinnati to more speedily reap the benefits of her large investment.

CRAWFORD HOUSE,



Cor. Sixth and Walnut Streets,

LEWIS VANDEN, - - Proprietor.

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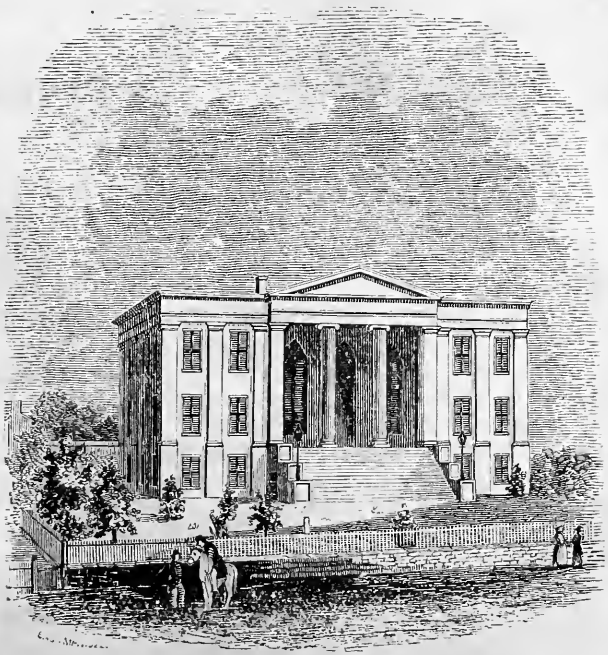
Only one square from the Custom House, Theatres, and Principal Places of Amusement.

Street Cars pass the door every five minutes to and from the ZOOLOGICAL GARDEN, Hill Tops, Parks, &c.

Terms, - - Only $2.00 per day.

ASHLAND, (Residence of Henry Clay,) near LEXINGTON, KY



MASONIC HALL, LEXINGTON, KY.

There were some changes in the Board of Trustees from time to time. William Hooper, resigned, January 26, 1875, and W. W. Scarborough, of the Cincinnati Gas Light and Coke Co., appointed his successor, February 15, 1875. Mr. Scarborough resigned November 13, 1875, and Alphonso Taft appointed his successor, December 13, 1875. Philip Heidelbach resigned Fegruary 7, 1876, and Henry Mack appointed his successor, March 11, 1876. Alphonso Taft resigned March 9, 1876, and Godfrey Weitzel appointed his successor, March 11, 1876. Godfrey Weitzel, in consequence of being a commissioned officer of the United States Army, was by a decision of the Solicitor General of the United States declared ineligible to position of Trustee without vacating his commission in the army, he therefore declined appointment to Trusteeship and Hon. John Schiff, was appointed in his stead, May 16, 1876. John Schiff died February 9, 1878, and A. H. Bugher was appointed his successor, February 14, 1878. The present Trustees of the Cincinnati Southern Railroad are,

MILES GREENWOOD,
E. A. FERGUSON,
R. M. BISHOP.
HENRY MACK,
A. H. BUGHER.

The notable features and landmarks along the line of the road, have been fully treated of in the present work, as well as the resources of the whole country that will bear tribute to the road. The people of Cincinnati can never have more than a faint conception of the immense and invaluable iron interests of "East Tennessee," and it will be amazing, if after sinking sixteen millions of dollars, during these stringent times, in the road, the people refuse to finish the undertaking. But there is little doubt of this, the foresightedness and business sagacity of our city has been tested in times past and will not change their record now.

CINCINNATI MUSIC HALL.

DESCRIPTION

OF THE

Cincinnati Southern Railway.

It is more than thirty years since the question of connecting Cincinnati by a railroad, through the States of Kentucky and Tennessee, with the States of the South lying beyond the Cumberland Mountains, began to be discussed. The importance of such means of communication has always been acknowledged, but the difficulties and cost of the route have prevented private capital hitherto from succeeding in the enterprise, although several attempts have been made. During the late civil war, so necessary to its operation appeared a direct transit through this part of the country, that the War Department ordered a survey of the route, and but for the sudden termination of the war, a railway would have been built by the United States Government.

Pressed by an increasing demand for its manufactures from its natural market, the South, and requiring in return the products of that fertile region, the city of Cincinnati has undertaken to accomplish in the only available way at command, what has become an urgent need to its citizens. The General Assembly of the State of Ohio, passed acts authorizing the construction of a railway by the city through a Board of Trustees, between two termini, one of which should be Cincinnati, the other to be named by the City Council, which designated Chattanooga. Said Trustees were empowered to borrow funds for the purpose, and to issue bonds therefor in the name of the city, with ample powers as to the time and place of payment. The country which this railway traverses, is rich in agricultural products, the blue grass region of Kentucky is widely celebrated. It has many small towns and centers of population, which only need the facilities of the road to be largely increased.

The Cumberland Hills are full of immense deposits of coal and iron. In Tennessee there are already several furnaces dependent now upon uncertain stages of water communication which will be vastly increased by railway means of transport. And it is noteworthy that every mineral road in the United States, is a paying road. But the chief purpose of this enterprise is to connect the system of railways north of the Ohio, with the system in operation south of Tennessee, to which hitherto the mountains and a sparsely settled country have been the chief barriers. In Ohio and Indiana on the north and leading directly to Cincinnati are 6,000 miles of railway. South of Tennessee and converging there, are 4,000 miles, and this railway will be as the neck between them. It is estimated that the extent of country which will thereby become a market for our manufactures, and from which we shall draw its special products, embraces an area of about 200,000 square miles, and in the whole of it there is no large town, and to it there is no eastern or northern city so accessible as Cincinnati. The success of the enterprise, as a paying property, seems to be assured from the start, but its advantage to Cincinnati is beyond the whole investment, as a means of business intercourse. Below we submit some facts regarding the position of the northern terminus of the road; the city of Cincinnati, in connection with the loan, it was necessary to obtain to build the road. The real property belonging to the city, acquired from time to time, was assessed at the last valuation in 1871, at $15,237,194.00. The present value of the same, is estimated, by the City Auditor, at $19,000,000.00. The property assessed for taxation, for the year ending June 30, 1872, was valued at $175,084,296.00 of which $119,621,886.00 was real estate, and $55,462 410.00 was personalty. The present city tax levy is 20 mills on each $100.00. The bonded indebtedness of the city, for 1873, was $6,101,500.00 from which should be deducted balance of cash in Treasury, $566,703.00. Of this debt the sum of $1,625,000.00 has been expended for water works which yield a gross income of $610,960.00 annually. A revenue of $79,428.00 per annum, is derived from public wharfs, markets, licenses and fines. The rest of the bonded debt has been expended in hospitals, school-houses, infirmaries, etc. The population of the city by the census of 1870, was 216,239 since which time there has been an increase, and if the cities of Covington and Newport in

Kentucky, on the opposite bank of the Ohio River, which are practically parts of Cincinnati, be taken into account, there is within a radius of three miles, a population of 300,000. According to statistics, obtained from the Board of Trade, the value of the imports, exports, and manufactures of Cincinnati for 1870-1-2, are as follows: Imports, 1870, $312,978,665; 1871, $283,796,219; 1872, $317,646,608. Exports, 1870, $193,517,690; 1871, 179,848,427; 1872, $200,607,640. Manufactures, 1870, $127,459,021; 1871, $135,-968,365; 1872, $143,486,675.

The first important feature upon leaving Cincinnati, on the Cincinnati Southern Railway is the Ohio River Bridge. This beautiful and imposing work, with its web-like and delicate appearing but strong and durable super-structure, is located on Section 1, Division "A." (The whole road is divided into divisions averaging 40 miles each and sections 1 mile each,) it has five spans, the first two are each 296 feet long, and are called through spans, the third, of the same kind, has a length of 515 feet, the fourth is a draw, 366 feet long and the fifth is a deck span of 108.5 feet length, this gives a total of 1,581.5 feet in length independent of the approaches. This was let to the Keystone Bridge Co., for the sum of $663.570, which price included super-structure, masonry and foundations. Over this we are carried on the "Sacred Soil" of Kentucky, into

LUDLOW.

in Kenton County of which we will give a brief history:—Kenton County is one of the newest and smallest in the State, the 90th in order of formation and was organized in 1840, out of the west half of Campbell County, as divided by Licking River. It is only from 6 to 12 miles wide and 25 miles long: the turnpike to Lexington making it easy of access along its western length, as does the Kentucky Central Railroad along its eastern line. The southern border is at Grassy Creek, a little north of Crittenden, Grant County. It is situated in the extreme northern part of the State, opposite Cincinnati, Ohio; is bounded north by the Ohio River, east by the Licking River, which separates it from Campbell County, south by Pendleton and Grant Counties, and west by Boone County. The bottom lands are rich and very productive; the uplands undulating or hilly, but grow fine wheat, corn and tobacco The county is dotted with fine gardens and has many excellent dairy farms for the supply of the Covington and Cincinnati markets. The lands along the Lexington Turnpike are of very superior quality. Independence is the original county seat, 11 miles south of Covington; incorporated in 1842; population in 1870, 134. But the necessities and convenience of the people have gradually invested Covington, also with nearly all the advantages of the County seat, it being the place of record of all conveyances of property in and near its limits; and the longest terms of all the courts, as well as terms of the U. S. District Court for Kentucky, being held there. Covington is situated on the Ohio River, immediately at and below the mouth of the Licking River (which separates it from Newport,) and opposite the great city of Cincinnati, Ohio. It is built upon a beautiful plain, several miles in extent, and the principal streets were so laid off as to present the appearance of a prolongation or continuation of those of Cincinnati. Population at the present time about 32,000. It has a large and beautiful Court House and City Hall, twenty-four churches and four banks, a large and beautiful Government Building for Post-Office and Internal Revenue, is almost completed.

The population of Kenton County was 7,816 in 1840, when it was organized, and at the present time about 45,000; its area is 96,453 acres, value per acre $14.95 in 1846, in 1876, $50.00.

LUDLOW, KENTON COUNTY.

Ludlow, the first point on leaving the Ohio River, has a population of 2,000, which is on the rapid increase, as it is practicably a suburb of Cincinnati and should it obtain a side foot-way over the railway bridge, people will at once flock over from the bustling and noisy Queen City, for quiet homes near their places of business. There is a large yard for standing room and switching located here; a great deal of grading has made a long and beautiful plain or table land, on which is located a commodious Freight and Passenger Depot, a round house and various other buildings; here, too, is the inclined plane leading down to the Ohio River, thereby connecting our road with the large commerce carried on upon its rolling waters. Dayton, Newport, West and South Covington, Ludlow, Bromley, &c., all face Cincinnati, and at no very far distant date, will be consolidated; their combined population is nearly 100,000; there is ample room for doubling this number, and no better investment or speculation can be found than vacant ground in or near these places But we will not tarry, going on southwardly, we next come to three master pieces of iron trestle work, one on an easy curve, the other two on tangents or straight lines, on Sections 3 and 4, crossing Horse Run and two branches of Pleasant Run. These were also let to the Keystone Company, for about $85,000. Next we come to

GREENWOOD STATION.

This place named after Miles Greenwood, the popular President of the Board of Trustees, has few houses as yet, but a beautiful location, selected by the trustees, as a suitable site for their shops, yards, &c., being only seven miles out and the first point at the head of the long grade running up from the Ohio River, and having the prospect of a large amount of business, together with its fine surrounding country, we predict a prosperous future for this little place. Three miles farther on and we find another piece of iron trestle over Rici Creek, 510 feet long, costing $22,322.18 and next we enter Boone County. What a host of recollections is called up by the name of Boone, who has not heard of this brave, unselfish, old pioneer, who, with untold toils and hardships, opened this grand country for the benefit of succeeding generations. In mentioning this good man's name, we will also refer to Simon Kenton, equally good but perhaps less illustrious, in honor of whom was named the county, we have just left. Boone County was the 30th in order of formation in the State and was organized in 1798, out of part of Campbell County; it is situated in the most northern part of the State, in the "North Bend" of the Ohio River, its average length north to south, is about twenty miles, and its average breadth about 14 miles, it is bounded on the east by Kenton, south by Grant and Gallatin Counties, north and west by the Ohio River, which flows along its border about 40 miles, dividing it from the States of Ohio and Indiana. The land is nearly all tillable, a portion level, but generally hilly; the river bottom very productive; farther out from the river, good second rate. The principal streams are Woolper, Middle, Gunpowder, Big Bone and Mud Lick Creeks. Burlington, the county seat, incorporated in 1824, is 13 miles by pike from Covington, population in 1870, 277; it lies off to the west of the railroad. The population of the county, according to the United States Census in 1870, was 10,696; in 1860, 11,196; in 1850, 11,185; in 1840, 10,034; in 1830, 9,075; in 1820, 6,542; in 1810, 3,608; in 1800, 1,534; the area of the county is 151,599 acres, valued in 1846 at $14 39 per acre, in 1870, $24.68. Statistics show that in 1870 the county contained 4,528 horses, 621 mules, 6,335 cattle, 12,000 hogs and produced for the same season, 5,948 tons of hay, 625,848 bushels of corn, 83,354 of wheat, 1,030 of barley and 231,645 pounds of tobacco—showing that the county may be considered in a flourishing condition. The first town near the railway is

FLORENCE.

lying a half mile to the westward, by pike it is 9 miles from Covington and 6 miles from Burlington; it was incorporated in 1830, population now 400. Still onward we come to the crossing of the Louisville Short Line Railroad This we glide over on an iron through span bridge, 126 feet long, at $66.25 per foot, built by the American Bridge Co., after which we enter

WALTON.

18 miles from our starting point. A little farther on and we again enter Kenton County, crossing a corner of which we are rushed into Grant County, formed in 1820, out of the western part of Pendleton County; it was the sixty-seventh formed in the State. In shape it is a parallelogram, nearly a square, twenty-two and a half miles from north to south, and twenty miles from east to west. It is situated in the northern part of the State, and bounded north by Boone and Kenton Counties, east by Pendleton, south-east by Harrison, south by Scott and Owen, and west by Owen and Gallatin Counties. The streams are Eagle Creek, which flows northward through the western part of the county and finally empties into the Kentucky River, and its tributaries, Clark's, Arnold's and Ten Mile Creeks; and on the eastern side of the county, Crooked Fork Lick and Grassy Creeks, tributaries of the Licking River. The face of the county is undulating, seldom hilly; the soil north of Williamstown, along the Dry Ridge and the arms of the Ridge is very rich, south of that place it is thin, but in the western part moderately good. Wheat, corn, oats and hogs are the largest productions. The crops of the county in 1870, were 155,950 pounds of tobacco, 700 pounds of hemp, 1,509 tons of hay, 612,079 bushels of corn, 34,059 bushels of wheat, 1,631 bushels of barley, it also contained at that time 4,225 horses, 431 mules, 5,217 cattle, 8,000 hogs. The population ranged as follows: 1870, 9,529; 1860, 8,356; 1850, 6,531; 1840, 4,192; 1830, 2,986; 1820, 1,805. Its area is 136,891 acres, valued in 1846, at $4.60 per acre; in 1870, at $14.92. The highest number of slaves ever held, numbered 696 in 1860. From these facts gathered carefully from past statistics, the reader can readily judge of the standing of the county. Five minutes will now bring us from the county line to Crittenden (named after the Hon. John J. Crittenden), on the turnpike 11 miles north of Williamstown by pike, and twenty-five miles south of Cincinnati; established in 1831, population in 1870, 295, present 500; contained at that time 3 churches, (Reformed, Presbyterian and Baptist), a school house, 2 hotels, a lawyer, 3 physicians, 1 drug-store, 4 dry-goods stores, and 5 mechanics shops. We next come to

DRY RIDGE.

4 miles north of Williamstown by pike, it has 2 stores, 2 saloons, a steam grist and saw mill, and blacksmith shop; and in the vicinity, 2 churches, (Baptist and Methodist), a school and a physician.

WILLIAMSTOWN.

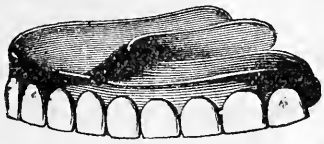
lies mostly on the west side of the road; it is the county-seat. In this connection the following letter from the Hon. O. P. Hogan will be of interest.

In response to your communication of Sept. 15th, would state, that the Cincinnati Southern Railway crosses into Grant twelve miles north of Williamstown, (near the town of Crittenden, in this county, the said town has a population of about 400) thence said railway runs along parallel with the Covington and Lexington turnpike, a wide ridge of land, of rich and productive soil, well improved, with views for building sites, both to railway and turnpike. The land, from Crittenden to Williamstown, is worth from $50 to $100 per acre, according to the amount and kind of improvements. On an average of about every two miles there are, intersecting the railway and turnpike, county roads, which extend east and west to the borders of the county, and, generally, the roads run out ridges of land very similar to the main ridge, on which roads land valued from $20 to $60 per acre, depending on improvements and proximity of turnpike and railway. Williamstown is situated immediately on the turnpike and railway, thirty-five miles from Cincinnati by rail and at the junction of five county roads leading in every direction, and extending along nice ridges of land into the adjacent counties of Owen, Pendleton, Harrison, Scott and Gallatin. It contains about 800 inhabitants, two large flouring mills, one planing mill, two blacksmith and wagon shops, six dry goods stores, four groceries, two drug stores, one hardware and tin store, two large and commodious hotels, two large livery and sale stables, three good size churches, two good schools, one free the other private; in fact it is a thrifty town, and more business is done in it than any town within 100 miles of Cincinnati, of same population. There is a large three-story Odd Fellows' building with town hall, the finest court house in the Eleventh Judicial District, jail and other public buildings. The railway runs south of Williamstown on the same ridge about thirteen miles to the county line. The lands are not so rich and valuable but more hilly, the timber is mostly very fine, oak and hickory; it produces good wheat, corn and tobacco; the lands south of here rate at from $20 to $40 per acre. The country along the ridge and high lands here are free from that miasma which is so unhealthy in low lands, consequently we have very little chills or fever, and this country is considered one of the healthiest in the world. Fruits of all kinds do well here. The citizens are quiet, orderly and tolerably well educated; there is a good free school in every district. The county tax is $1.50 per capita, and only 40c on $100 for State tax, county is out of debt with money in the treasury. One good water course, Eagle creek, passes through the western part of the county, about seven miles from the railway. This creek will afford a good water power for mills, manufacturers, &c. The population of this county is about 10,000.

Respectfully, O. P. HOGAN.

Not dwelling longer, we come to the corner of Owen, Harrison and Scott counties. We do not touch Owen, but meander from Harrison to Scott, or rather the railway line is comparatively straight but the county line curves in every direction, having been formed, according to our memory, by an old pioneer road. Seeing very little of Harrison county we continue through Scott, which was named in honor of Gen. Charles Scott, afterwards Governor. It was formed out of part of Woodford, in 1792, and was the second born of the new State of Kentucky, but the eleventh in all, including the counties formed by Virginia before the admission of Kentucky into the union. It is situated in the northern middle part of the State and bounded north by Owen county, north-east and east by Harrison and Bourbon, south by Fayette and Woodford and west by Franklin. It is well watered by North Elkhorn, South Elkhorn and Eagle creeks, with their tributaries. South Elkhorn forming the south-west boundary line. The southern and south-eastern portion bordering on Woodford, Fayette and Bourbon, is embraced in that beautiful "Blue Grass Region," known also as the "Garden of Kentucky;" with a level or very gently rolling surface, and a deep, rich, black soil, based on limestone, and unsurpassed in fertility. In the north and north-west portions of the county the surface is hilly and broken, and the soil not nearly so productive. The exports consist, principally, of horses, mules, cattle, hogs and hemp. Great attention is paid to the raising of blooded horses and cattle; corn and hemp are the leading products. In 1870 Scott was the eleventh county in the State in taxable property. The population of the county was, in 1870, 11,607; its area 184,774 acres; this averages nearly sixteen acres to the individual. The crops for the same year were 41,750 pounds of tobacco, 1,147,000 pounds of hemp, 1,722 tons of hay, 843,335 bushels of corn, 71,285 bushels of wheat, 1,375 bushels of barley; the stock of that year was 5,162 horses, 1,373 mules, 8,546 cattle, and 15,000 hogs. The highest number of slaves

DENTISTRY.



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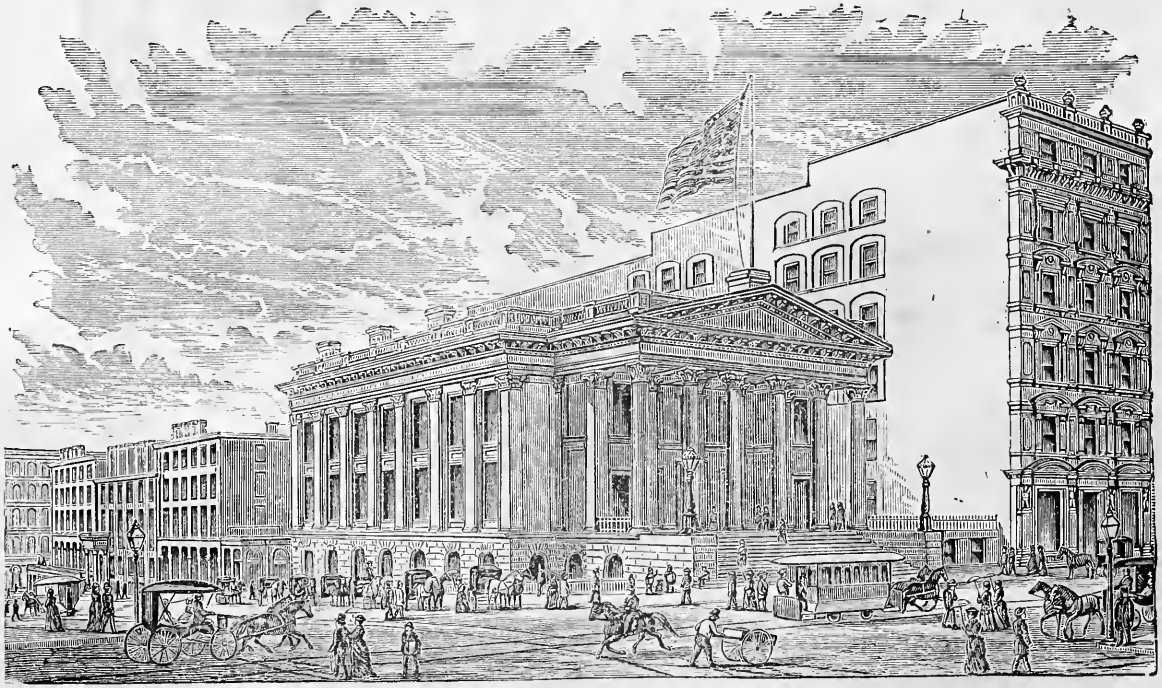


POST OFFICE, CORNER OF FOURTH AND VINE STREETS.

ever held in the county was in the year 1850, and numbered 8,891. In 1846 land was valued at $20.73 per acre, in 1870 at $26.27. Scott county donated 22.63 miles of land, about 100 feet wide, as "right of way," to the railway. The first stream of any size, which we cross in this county, is Eagle creek: the country through which it passes has been a great expense in the construction of the road, showing some of the heaviest of work. These hills are so irregular that it was a long time before the final location could be decided on by the trustees. Eagle creek is crossed by a deck bridge of one 150 feet span, costing $68 per lineal foot, and 510 feet of iron trestle, eighty feet high, built by the Louisville Bridge Co. When we pass these picturesque hills and valleys we glide into a beautiful farming country, studded with elegant and comfortable farm houses, everything bespeaking thrift and happiness. The rolling and undulating surface affords some of the finest building sites, and it only needs taste in planting shrubbery to give a beautiful appearance to your residence, or even though it be a house of more humble pretensions, it will often remind you of "love in a cottage."

GEORGETOWN.

the county-seat, lying on the railway, and situated in the midst of these agricultural resources, is a flourishing town of 1,800 inhabitants, nearly the same number it had twenty years ago. For a full description of this pretty place we are indebted to J. H. Steffee, postmaster; we give his letter as we received it.

GEORGETOWN, SCOTT CO., KY., September 19th, 1877.

GENTLEMEN:—"Your favor of the 14th received Saturday and I take the first opportunity for replying.

The first block house settlement here was made about 1776 or 80 It was built contiguous to a mammoth spring of water now famous as "The Big Spring," which is the greatest natural curiosity in this section of the state. An old citizen tells me that in the year 1800, a merchantile firm here, used to bring over the Alleghenies, on pack mules, merchandise and sell to Cincinnati then called Losantiville. Our town now contains 1800 inhabitants. It lies twelve miles north of Lexington and nearly midway between Paris and Frankfort, seventeen miles from Paris, eighteen miles from Frankfort. It is six miles from Payne's Depot, Louisville and Lexington railroad. Nearly all our goods are now received over the Payne's depot pike. Georgetown college is nearly forty years old and has graduated many men now prominent in the south and west. We have also the Georgetown Female Seminary and two other flourishing female seminaries viz: Warren, dale and Mrs. Ballou's; one free school and several private schools, five white churches viz: Methodist, Baptist, Roman, Campbellite and Presbyterian, two fine colored churches, Methodist, and Baptist, three hotels, Georgetown, Pratt's and Central, two banks, branch Farmers bank, with a capital of $400,000 and Deposit bank capital $50,000, one Gas Works, three dry goods stores, three general merchandise stores, two large clothing and shoe stores, seven large groceries and about one dozen whisky saloons. The Secretary of the State Grange is located here.

Georgetown is probably the prettiest town in the state. It contains a good many new and handsome brick residences, the streets are well shaded and nearly all the business portion of the town burnt and rebuilt within the last seven years. We have fifteen lawyers, ten doctors, and two real estate firms. The town is situated in the south-western portion of the county, which raises hemp, wheat, corn, oats, rye, barley, mules, hogs, cattle and sheep. We have a new town hall called Barlow's Hall, seating comfortably 400 persons, with stage and scenery complete. The Weekly paper here is the Georgetown Times. Any thing more you may want, I will send you,"

Respectfully,

J. H. STEFFEE, P. M.

When originally settled, Oct. 1775, Georgetown was called McClelland's Station, but from about 1784 to 1790 Lebanon; in the latter year it was incorporated by the Legislature of Virginia and the name changed to Georgetown in honor of George Washington. Georgetown College began its chartered existence in 1829, but the Faculty was never full until 1840, and the usual classes were not all formed till 1842. The commencement of the enterprise was a legacy of $20,000 from Isaacher Paulding, a native of New Jersey, long settled in Kentucky, but most of the endowment was obtained in 1839, by the Rev. Rockwell Giddings, from New England, who had settled over the Baptist church in Shelbyville. He was elected President of the college, and in less than a year obtained about $70,000 in subscriptions, but died before he had completed his great work. Rev. Howard Malcom, D. D., succeeded him as president from 1839 to 1849. Rev. Duncan R. Campbell, D. D. L. L. D., was the distinguished president from 1852 until his death in 1865, by whose judicious management and fine business tact the institution was placed upon a solid financial basis. Rev. N. M. Crawford, D. D., was the next president, until 1871. In

1858, there were eight professors, 132 students and a library of 7,500 volumes; in 1871 there were seven professors and 145 students. The college has generally been well sustained, and has been eminently useful. In 1873 it had an able faculty, with Rev. Basil Manly, D. D., as president, and energetic and successful efforts were being made to increase its endowment and efficiency. In the theological department were a number of candidates for the ministry. The Western Military Institute was established about 1844, by Col. Thornton T. Johnson, who, as well as most of the professors, were educated at the U. S. Military Academy at West Point. It was quite flourishing for a number of years; then it was removed to the Blue Lick Springs, but, after some fifteen years, was discontinued. Two Female Seminaries in Georgetown have been well sustained for over thirty years past.

The "Royal Spring" was the name given in 1775, to one of the finest springs in the State, which bursts from a high bluff of limestone rock, flows through the west end of Georgetown, and empties into the Elkhorn five-eights of a mile from its source. The spring affords an ample supply of water for the entire population, and the stream flowing from it, sufficient water power for a woolen factory and grist mill which are located upon it. McClelland's Station or Fort, at the Royal Spring, where Georgetown now stands, was the first fortified station built anywhere north of Kentucky river—unless McGee's, in now Clark county, three miles north of that river at Boonesborough—was settled a few weeks previous, which cannot now be decided, it was erected in the summer of 1776. On the 29th of December, of the same year, when defended by only about twenty men, it was attacked by forty or fifty Indians, under the famous Mingo chief Pluggy, three days after they had defeated, near the Lower Blue Licks, Col. John Todd's expedition after powder. The attack lasted for several hours, and was only discontinued then, by reason, as was afterwards learned, of the death of Pluggy. Of the whites, two were mortally wounded, John McClelland and Chas. White. Gen. Robt. Todd and Capt. Edward Worthington were seriously wounded, but both recovered. The terror inspired by this event caused the occupants to abandon the fort and retire to Harrodsburg. The subsequent history of this fort and its defenders is a romantic one, but we have already dwelt too long upon this spot and so, to make amends, will hurry into Fayette county. This county was formed in 1780 by the State of Virginia and is one of the three original counties that at one time comprised the whole district of Kentucky, and included all that territory beginning at the mouth of the Kentucky river and extending up its middle fork to the head, and embracing the northern and eastern portion of the present state. It received its name as a testamonial of gratitude to Gen. Gilbert Mortier de La Fayette, the gallant and generous Frenchman who volunteered as the champion of liberty, on this side of the Atlantic, and proved to the world that, although a nobleman by descent, he was a republican in principle, and was more enobled by nature than by all the titles of hereditary rank.

Fayette county is situated in the middle portion of the State and lies on the waters of the Kentucky and Elkhorn. It is bounded on the north by Scott, east by Bourbon and Clark, south by Madison and Jassamine, and west by Woodford; being twenty-five miles from north to south, mean breadth eleven miles, and containing 275 square miles. It is fair table land, all the streams rise and flow from the center of the county, and empty into their common receptacle, the Kentucky river, the center of the garden of Kentucky. The surface of this county is gently undulating, and the soil is probably as rich and productive as any upon which the sun ever shone. It is properly a stock raising country, horses, mules, cattle and hogs in large numbers, being annually exported, but corn and hemp are produced in great abundance, the latter being generally manufactured in the county. Timber is very scarce growing only on the banks of the small streams. The population of the county in 1870, according to the U. S. census report was 26,656, in 1860, 22,599, in 1850 22,735, in 1840 22,194, in 1830 25.098. Its area is 163,649 acres, showing at present, about six acres to the individual; in 1846 worth $33.95 per acre, and in 1870 $45.42. The highest number of slaves ever held in the county, which was in 1850, was 10,886, being about one slave to every fifteen acres. The crops for 1870 were 4,364,900 pounds of hemp, 3,093 tons of hay, 1,099,195 bushels of corn, 81,400 bushels of wheat, 20,405 bushels of barley; and the county owned 5,879 horses, 1,939 mules, 12,260 cattle, and 10,000 hogs. Fayette donated sixty-four miles of roadway, and sold 13.17 miles to the Trustees, and also donated $34,880. The only town of any note, lying on the railway, in this county, is

LEXINGTON,

the county seat. It is a remarkably neat and beautiful city, situated on the Lower fork of Elkhorn creek, twenty-five miles south-east of Frankfort, sixty-four miles south-west of Maysville, seventy-seven miles south-east of Louisville, eighty-five miles south of Cincinnati by pike, seventy-nine by C. S. Railway, ninety-nine by Kentucky Central R. R., eighteen miles from Paris and 517 from Washington City. Its streets are laid out at right

angles, and are well paved. Few towns are so delightfully situated. Many of the private residences, and several of the public edifices, are fine specimens of architectural taste. It has a public library, established 1795. Kentucky, formerly Transylvania University, with its college of arts, college of the Bible, law college and agricultural and mechanical college, with five literary societies and a monthly magazine, The Collegian. Twenty schools, public and private, eighteen churches and twenty-six clergymen, five printing offices, publishing eight newspapers, with fourteen editors, forty-six lawyers, twenty-nine physicians, four book stores and book bindery, four architects, one sculptor, two portrait painters and photograph galleries; while one large element of that ancient glory was consumed in the fire that destroyed the Transylvania Medical Hall. In the mercantile line of buying, trading and selling, it has stores as follows: eight banks or banking houses, twenty-two dry goods, ten drug, 119 grocery, sixteen millinery, fifteen confectionary, twenty-one boot and shoe, ten clothing, five furniture, five hardware, four agricultural implements, seven jewelry, besides eight merchant tailors, eight sewing machine, and fifteen dress making; ten coal yards, four lumber yards, etc. Of factories, large and small, one woolen, four flour, and four planing mills, one foundry and two machine shops, one agricultural implement, nine carriage, four wagon, five hemp and bagging, one mustard, one soap and candle, two broom, two pump, four mattress, and several other factories. It has ten hotels, eight restaurants, thirty-seven saloons and any reasonable number of boarding houses. Besides these there are more than a hundred other business houses, mechanics shops, offices or stores of some kind. The population is nearly 20,000. The city is lighted with gas, and has four public halls and a theatre.

RAILROADS.—The Kentucky Central Railroad runs north ninety-nine miles to Cincinnati, twenty miles longer than the route we have just come over. The Louisville, Cincinnati and Lexington connects to Louisville direct, and via Lagrange Junction to Cincinnati. The Elizabethtown Lexington and Big Sandy was finished in 1872 to Mount Sterling and the work of extending it to Huntington, W. Virginia, is progressing steadily. It crosses the Big Sandy river about one and a half miles from its mouth, at Cattlettsburg.

RACE HORSES AND HORSE RACING.—Fayette county is probably the most famous spot in America, if not in the world, for fine and fast blooded horses. It is emphatically the home of "winning" horses, remarkable for speed and endurance on the turf of the United States, and known and appreciated in England. The first recorded public race in Lexington was in August, 1789. Races have been kept up with rare, if any, intermission, ever since—now eighty-three years. The first organized association, the Lexington Jockey Club, was formed in 1809 and prospered until 1823. On July 20th, 1826, the turfmen again combined "to improve the breed of horses by encouraging the sports of the turf," and organized the present Kentucky Association. Over the Lexington course, the following is the fastest time made in 1827 and at various later dates—

THREE-QUARTERS OF A MILE.—The fastest time over this course, in the only four races ever run prior to Sept. 15, 1871, was 1:18¼. In June, 1872, in a dash at Saratoga, a Kentucky horse, Alarm, won easily in 1:16, the fastest three-quarters of a mile on record.

ONE MILE.—In 1827, the best mile was by Mariah in 1:51. Within the next twenty-one years, up to 1848, thirty-two one mile races were run, only three of them in better time than in 1:50, and a majority of them much slower. Subsequently, in 1841 a mile was run by Jim Bell in 1:46, in 1848, by Spencer Graves' Trustee colt in 1:47½; in 1852, by John M. Clay's Star Davis, in 1:46½; in 1853, by his Charles Ball, in 1:45¾; in 1857, by Bradley's Nannie Clark, in 1:45½; in 1861, by Idlewild, in 1:45; in 1862, by McGrath's Mammonia, in 1:44¼; in 1871, by Fadladeen and Salina, who each run a mile in 1:43, the fastest time over this course, and then the fastest on record. In 1872, Alarm beat Fadladeen, in 1:42¾. On July 14, 1871, at Saratoga, in a race of two and a quarter miles, in 4:02¾; Longfellow run one mile of it in 1:40, "but it is not a record for him."

ONE MILE AND A QUARTER.—The fastest of the only two races, before Sept. 1871, was 2:14½. In 1872 Frogtown made one and a quarter miles in 2:09½. The fastest one and a quarter miles ever made was in the great race, June 16, 1872, between Longfellow and Harry Bassett, in 2:08½.

ONE MILE AND A HALF.—The fastest time over this course, in the only three races before Sept. 1871, was in 1871, by Exchange, in 2:38. In 1871, in a two and a quarter mile race at Saratoga, in 4:02¾, Longfellow made one and a half miles of it in 2:33, "but it is not a record for him." Enquirer had previously made one and a half miles in 2:35¾ and Longfellow and Harry Bassett made the same time, June 16, 1872.

ONE MILE AND THREE-QUARTERS.—In 1872 Frogtown made the fastest time in 3:07. Previous to that, in August, 1869, over another course, Corsican made one and three-quarter miles in 3:07¾.

TWO MILE RACES.—1:41 had been run over this course before Sept. 1871. In 1827 a two mile race was run in 4:15; Oct. 17, 1837, one by Jas. Lindsey's bay filley, in 3:35; Sept. 12, 1869, two heats by Lancaster in 3:35½ 338½; May 23, 1871, one by Lyttleton in 3:34½.

In the last great race between Longfellow and Harry Bassett, at Saratoga, June 16, 1872 they made two miles in 3:30, the fastest ever run.

NO TWO MILE AND A QUARTER RACES were run over this course up to Sept. 1871. July 14, 1871, Longfellow, at Saratoga, made two and a quarter miles in 4:02¾; in August, 1865, Kentucky made, at Saratoga, 4:01½.

TWO MILE AND A HALF RACES.—Only two were made over this course earlier than Sept. 1871. In the race at Long Branch, July 2, 1871, Longfellow beat Harry Bassett, both Kentucky horses, two and a half miles in 4:34, but at the last great race between them, at Saratoga, June 16, 1872, Bassett beat Longfellow about six feet, in 3:59.

THREE MILE RACES.—Forty-nine were run prior to Sept. 1771, over the Association course, at Lexington. In 1827 Limber made two heats in 6:09, 6:07; in 1840, nine stallions started in a race, Blacknose winning the first heat in 5:40, and Red Bill the second and third heats in 5:48, 5:40: before 1850 Brown Kitty reduced this to 5:38. In 1853 Berry's time was 5:36½; Vandal's, in 1855, 5:33, and Red Oak's, in 1859, 5:32¾. Frogtown, in 1872, ran three miles in 5:29¾, with Hollywood close to his nose. Norfolk run it, in California, Sept. 23, 1865, in 5:27½, 5:29½.

FOUR MILE RACES.—Twenty-three only were run over the Lexington course prior to Sept. 1871, and only one of those after 1861. The time was, in 1827, Old Court, 8:17; none were run inside of eight minutes until, in 1850, Charmer made it in 7:51; in 1851, Monte in 7:43½; in 1853, Dick Doty, 7:37½; in 1858, Waterloo, in 7:37; in 1861, Lightning, in 7:35, and in 1870 Morgan Scout, in 7:32½. The fastest four miles on record was made "against time," April 2, 1855, at New Orleans, in 7:19¾, by Lexington, who, also, April 24, 1855, over the same course beat Lecompte in 7:23¾. April 8, 1854, Lecompte had beaten Lexington in 7:26 7:38¾, which "time" Lexington ran against for $20,000.

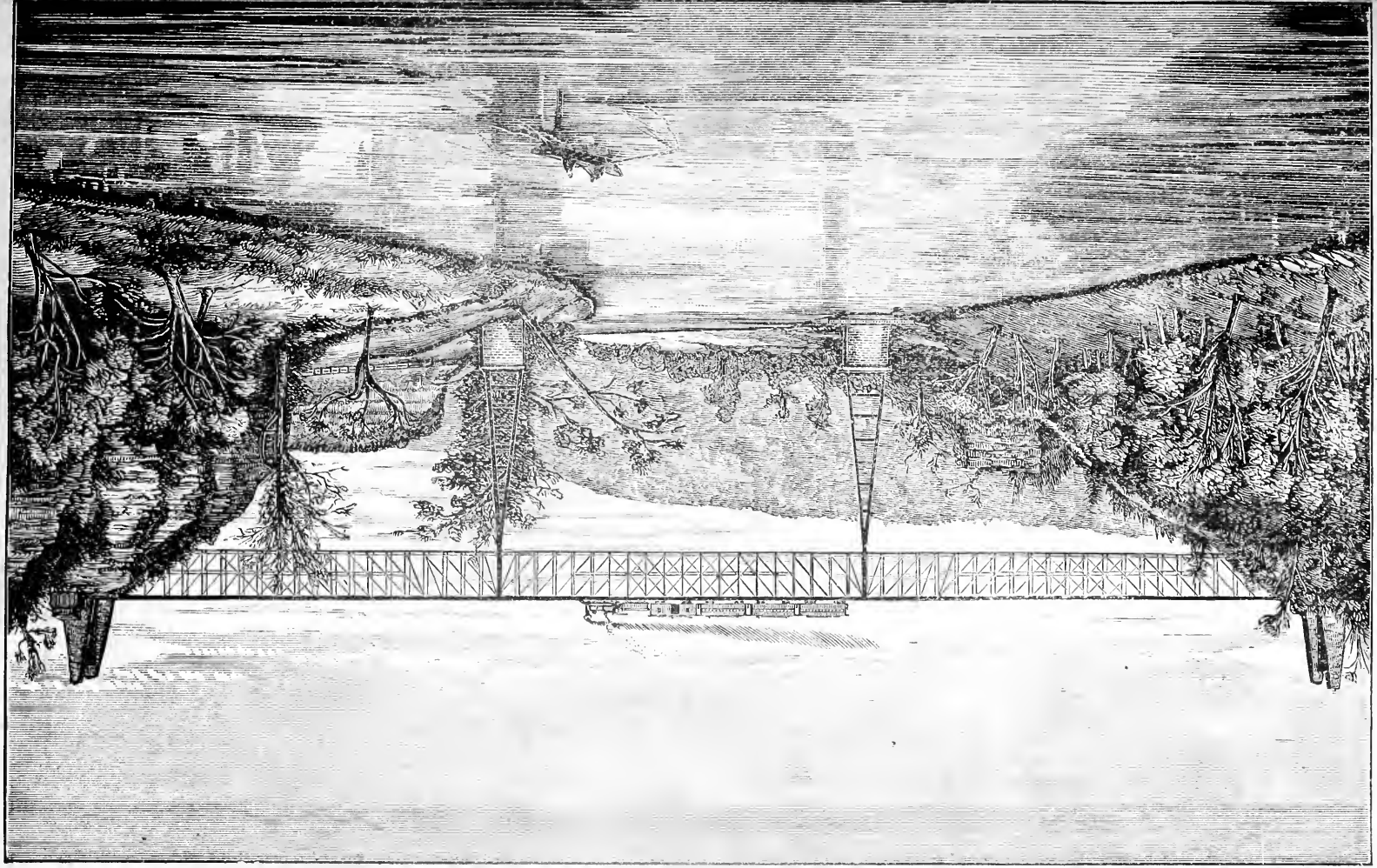
Idlewild, a Kentucky horse, over the Long Island course, June 25, 1863, made four miles in 7:26¼—claimed to be the best four mile on record, because he carried "full weight."

There are, located in Lexington, the Kentucky University, the Eastern Lunatic Asylum, and various seminaries having good systems and competent faculties. There is scarcely time to do these subjects justice, so we will merely refer the reader to Mr. Collins' History of Kentucky, giving a full and copious account of every minute circumstance. The Cincinnati Southern Railway barely touches this city on the west. Ample grounds have been obtained for freight, switching and depot purposes; here they cross the L. C. & L. R. R., and again make connection with the Kentucky Central Railroad and others running from the city. This place has for years been the home of Mr. W. A. Gunn, so long and honorably connected with this railway To him and his assistants, Cincinnati owes the admirable location of the road through those intricate mountains, which we may say has been the principal barrier to its construction. We cross the Louisville road and one of the streets on short bridges.

Lexington has grown very little in the last half century, and we hope this road will give it an impetus, which will rapidly develop its naturally great resources. Surrounded by a fertile farming region, having railroad access to the minerals and productions of the East and South, as well as having its rich memory of grand old statesmen; we think Lexington will always be a desirable home, and will grow rapidly for years to come.

The road bed between this place and Cincinnati is well located with light grades and easy curvature. After ascending from the Ohio river to the summit, a distance of six miles, on a grade of sixty feet to the mile, the maximum grade thence to the Kentucky river is only twenty-six per mile, which is lighter than on any other road leading out of Cincinnati, excepting the Cincinnati, Hamilton and Dayton. The relation between the alignment and grades is extraordinarily good for so rough a country. There is one instance of a continuous grade for a distance of three and a half miles. We wish to be understood when extolling this masterpiece of engineering, that we have in our consideration a strictly first-class road. There is a standard recognized by engineers, up to which all strictly first-class roads should be built. This standard will vary with the general features of the country, but, in general, it is the nearest practicable approach to a straight line and a continuous grade. This road is fully up to the standard, and, in our opinion, is better than there is any necessity for. There is a limit to the antagonism between the motive power and the grades, but just where this limit rests is difficult to ascertain. An ordinary freight locomotive will haul fifty cars up a twenty-six foot grade, but such a train is very wieldy and undesirable. The same locomotive will haul half the number up a much steeper grade, and the expense of an extra engine and the crew necessary for a train is many times less than the amount of interest on the cost of reducing the grades. It is policy then to make a liberal use of heavier grades and a greater number of trains.

From here to Nicholasville we run over an old road, bought by the Trustees. Fortunately it was of the right gauge and required but a small force to put it in thorough repair; a few trestles were filled with earth, the curvature at Nicholasville was reduced and



various other improvements were made. This line of road and the grading to the Kentucky river, the Trustees bought for $300,000, or about one-half of what the original work cost, or what it would cost now. This piece of railroad takes us from the center of this county to the center of Jessamine. Jessamine county, the thirty-sixth erected in Kentucky, was formed in 1798, out of the southern part of Fayette, and is situated in the middle section of the State, on the Kentucky river, which forms its south-east, south and south-western boundary line. It is bounded north by Fayette, east by Madison, south by Garrard, and west by Garrard, Mercer and Woodford counties. The part of the county north of Nicholasville, is gently undulating, with a black, friable, and remarkably rich soil, over the fossiliferous beds of the blue limestone; that which lies to the south over the chert beds and the Kentucky river marble, is not so good; along the river it is quite hilly and broken, but productive. The leading products are hemp, corn, blue grass, and cattle. The population of the county in 1870 was 8,638; 1850 10,249, 1810 8,377, so that we see it has been nearly at a stand still for six decades; the area is 101,399 acres; this gave, in 1870 a proportionment of about twelve acres to the individual; valued, in 1846, at $22.52, and in 1870, $29.18 per acre. The county donated three and a half miles of roadway, sold 12.48 miles, and subscribed $5,000 to the Cincinnati Southern Railway. The highest number of slaves ever held in the county, in 1850, was 3,825. The crops for 1870 were 2,200 pounds of tobacco, 1,860,620 pounds of hemp, 928 tons of hay, 494,171 bushels of corn, 87,875 bushels of wheat, 2,522 bushels of barley; the live stock for that year was, 3,514 horses, 919 mules, 5,241 cattle, 5,000 hogs. Sinking creek, in Jessamine, rises near the Fayette line, about one mile north of old Providence church or station, a very small stopping place on our route, runs west about two and a quarter miles north of Keene, passing through the farms of Nat. Lafon, Nat. Blackford and Jacob G. Sandusky, and unites in Woodford with a smaller sinking creek from the north, forming Clear creek. It sinks four times, running under ground from one fourth of a mile, to a mile each time. At times in the winter and spring, when the water cannot sink as fast as it falls, it is fifty feet deep, and a mile wide, and furnishes fine duck shooting. At the terminus of the old road, now a part of the Cincinnati Southern Railway, we come to

NICHOLASVILLE,

the county-seat. It is situated thirteen miles south of Lexington, and thirty-seven from Frankfort. It contains, besides the usual public buildings, eight churches, Methodist Baptist, Reform, Presbyterian, Roman and three for colored people; one male and one female academy, two schools, two hotels, fifteen stores and groceries, ten mechanics' shops, one bagging factory, six lawyers and six physicians; population in 1870, 1,089; established in 1812, and named in honor of Col. George Nicholas. In the heart of a fine country, and the terminus of the old road, Nicholasville is necessarily a place of considerable business. There is a good country for thirty-four miles south of here, until we strike the slaty lands at the foot of the "Knobs," the country from there on is finely timbered, chiefly with white oak and chestnut. A connection with the Louisville and Knoxville road, at the point of crossing, 110 miles from Louisville, brings the edge of the coal-field within seventy miles of Lexington. Going on southwardly from Nicholasville, we come to the first tunnel on the road, a few miles north of the Kentucky river, on section twenty, division C, as we have before stated, the whole railway line is divided into "divisions" averaging forty miles each; sections average one mile. This tunnel runs through limestone; the main tunnel is 506 feet long, besides the approaches or deep cuts at each end. Still further on and we come to the deep, tortuous and bold Kentucky river. The following account of some singular natural formations among the cliffs of this river—the most remarkable of which is the "Devil's Pulpit," a cut of which is here given—was written for Mr. Collins' History, in 1847, by Dr. Christopher Graham, who, at the ripe age of eighty-six, is still, as keenly appreciative of the beauties and curiosities of nature as ever:

"After much vexation and annoyance, occasioned by the difficulties of the road, we arrived near the object of our visit, and quitting our horses, proceeded on foot. Upon approaching the break of the precipice, under the direction of our guide, we suddenly found ourselves standing on the verge of a yawning chasm, and immediately beyond, bottomed in darkness, the "Devil's Pulpit" was seen rearing its black, gigantic form, from amid the obscurity of the deep and silent valley. The back-ground to this gloomy object presented a scene of unrelieved desolation. Cliff rose on cliff and crag surmounted, sweeping off on either hand in huge semi-circles, until the wearied eye became unable to follow the countless and billowy-like mazes of that strange and awful scene. The prevailing character of the whole was that of savage grandeur and gloom. A profound silence broods over the place, broken only by the muffled rushing of the stream, far down in its narrow passage, cleaving its way to its home in the ocean. Descending by a zigzag path to the shore of the river, while our companions were making preparations to cross, I

strayed through the valley. The air was cool, refreshing and fragrant, and vocal with the voices of many birds. The bending trees, the winding stream, with its clear and crystal waters, the flowering shrubs, and clustering vines walled in by these adamantine ramparts, which seem to tower to the skies, makes this a place of rare and picturesque beauty. The dew-drops still hung glittering on the leaves, the whispering winds played soft music through the rustling foliage, and the sunbeams struggling through the overhanging forest, kissed the opening flowers, and, all combined, made up a scene of rural loveliness and romance, which excited emotions of unmingled delight. The boat having arrived the river was crossed without difficulty, and we commenced the ascent; after measuring up two hundred and seventy feet we arrived at the base of the "Pulpit." Fifty paces from this point, and parallel with it, in the solid ledge of the cliff, is a cave of considerable extent. At its termination, there passed out like the neck of a funnel, an opening not larger than a hogshead. Upon pitching rocks into this cave, a rumbling was heard at an immense distance below the earth. Some are of opinion that this cave contains a bottomless pit. We now ascended the cliffs, some fifty feet further, clambering up through a fissure in the rocks, having the Pulpit on our right, and a range of cliffs on our left. To look up here makes the head dizzy. Huge and dark masses roll up above you, upon whose giddy heights vast crags jut out and overhang the valley threatening destruction to all below. The floating clouds give these crags the appearance of swimming in mid-air. The ascent up these rocks, though somewhat laborious, is perfectly safe, being protected by natural walls on either side, and forming a perfect stairway with steps from eight to ten feet thick. At the head of this passage, there is a hole through the river-side of the wall, large enough to admit the body, and through which one may crawl, and look down upon the rushing stream below. At the foot of the stairway stands the Pulpit, rising from the very brink of the main ledge at more than two hundred feet of an elevation above the river, but separated from the portion which towers up to the extreme heights. The space is twelve feet at bottom, and as the cliff retreats slightly at this point, the gap is perhaps thirty feet at the top The best idea that can be formed of this rock is to suppose it to be a single column, standing in front of the continuous wall of some vast building or ruin, the shaft standing as colonnades are frequently built upon an elevated platform. From the platform to the capital of the shaft is not less than one hundred feet, making the whole elevation of the "Devil's Pulpit" three hundred feet It is called by some the "Inverted Candlestick," to which it has a striking resemblance. There are two swells, which form the base moulding and occupy about forty feet of the shaft. It then narrows to an oblong of about three feet by six, at which point there are fifteen distinct projections. This narrow neck continues, with some irregularity, for eight or ten feet, winding off at an angle of more than one degree from the line of gravity. Then commences the increased swell, and craggy offsets, first overhanging one side, and then the other, till they reach the top or cap rock, which is not so wide as the one below it, but is still fifteen feet across."

JESSAMINE COUNTY IN 1789.—From the first complete American geography, really a great work, written by Judiah Morse, and published in the spring of 1789, at Elizabethtown, New Jersey, we extract the following account of the lands at that early day in the region within thirty miles around Nicholasville:

"Elkhorn river, a branch of the Kentucky, from the south-east, waters a country fine beyond description. Indeed the country east and south of this, including the headwaters of Licking river, Hickman's and Jassamine creeks, and the remarkable bend in the Kentucky river, may be called an extensive garden. The soil is deep and black, and the natural growth; large walnut, honey and black locust, poplar, elm, oak, hickory, sugar-tree, etc. Grape vines run to the tops of the trees, and the surface of the ground is covered with clover, blue grass and wild rye. On this fertile tract, the Licking river, the head-waters of Salt river, are the bulk of the settlements in this country. The soil within a mile or two of the Kentucky river is generally of the third and fourth rates, and as you advance towards the Licking, the land is in large part poor and hilly. The banks or rather precipices, of Kentucky and Dix's rivers are to be reckoned among the natural curiosities of this country. Here the astonished eye beholds 300 or 400 feet of solid perpendicular rocks, in some parts of the limestone kind, and in others of fine white marble, curiously checkered with strata of astonishing regularity. These rivers have the appearance of deep artificial canals. Their high rocky banks are covered with red cedar groves, very pretty in appearance.

The accounts of the fertility of the soil have in some instances exceeded belief, and probably been exaggerated. The high grounds of Kentucky are remarkably good. The lands of the first rate are too rich for wheat, and will produce fifty and sixty, and in some instances, 100 bushels, or even more, of good corn to the acre. In common the land will produce thirty bushels of wheat or rye to the acre. Barley, oats, cotton, flax, hemp, and vegetables of all kinds, common to this climate, yield abundantly. The old Virginia planters say, that if the climate does not prove too moist, few soils known will yield more or better tobacco."

CAMP NELSON.—In the late war between the North and the South, this country was the principal point for the concentration of Federal forces and munitions of war, on the Cumberland line. In 1863 Camp Nelson, so called in compliment to the late Maj. Gen. Wm. Nelson, was established on the Kentucky river, at the mouth of Hickman creek, in Jessamine county, and occupied till the close of the war. It had a fortified circumference of about ten miles, formed, in great part, by the high surrounding hills and cliffs of the Kentucky river, and partly by breastworks thrown up, that yet remain. The lands thus occupied had been heavily timbered but were rendered a barren waste, though the country elsewhere was not materially damaged, there having been no battles of note fought therein. This was the principal camp in the State for the enlistment of colored troops, and the refuge of colored refugees from slavery, On these lands is now established a U. S. Military Cemetery, finely and substantially improved, and in which are interred thousands of Federal soldiers. Jessamine county derives its name from Jessamine creek, which rises in the north-western part of the county, and flows southwardly through it to the Kentucky river. The creek was named in honor of a beautiful young lady, Jessamine Douglass, whose father, a Scotchman, early settled at the head of the creek, "entered" the land around it, and selected its name. The creek is of good size, and as large at its source as at its termination. It rises at two points, about ten feet apart; at one it boils up from a bed of gravel; at the other, gushes from between two large smooth rocks, and is very deep. Upon one of these rocks, the fair Jessamine was sitting, unconscious of danger, when an Indian's tomahawk crashed through her brain and ended her young life there.

The Cincinnati Southern Railway crosses the Kentucky river on a Deck bridge of three equal spans, having a total length of 1,125 feet. There are 12,390 cubic yards of masonry, all of which was built by the Baltimore Bridge Co., for the sum of $377 500. This bridge is 275½ feet above low water. The amount of masonry required was immense. Messrs. Rogers, Scully & Co. had the contract for the masonry and pushed it with great vigor. They constructed, at considerable expense, an inclined plane railroad to lower the rock down to the work. The Baltimore Bridge Co. had the contract for the whole work, but let the masonry to the above parties. The bridge consists of one iron deck truss of three spans, 375 feet each, from center to center; piers were built of masonry to a height of 64½ feet above low water mark. Upon this masonry rests the iron trestle work, really a continuation of the piers, to the bridge seat, upon which rests the ends of the trusses. The abutments are built upon the cliffs on each side, and are about forty- three feet high. Owing to the great height of the trestle work, and the fact that the two piers are located near the shore line on either side, there will be no obstruction to navigation on the river.

The reason that a bridge of such height was required, is because the waters of the Kentucky, like all other streams in central Kentucky, have cut down deep into the limestone, in the ages of the past, and now have their bed from two to five hundred feet below the general surface of the country. A cut of the bridge is here appended.

The cliffs, where the bridge is located, are very nearly perpendicular. This is said to be the highest pier bridge in the world. Crossing this river we come into Mercer county, but before we go further, one thing more of the crossing. Twenty-five years ago, in the old Lexington and Danville Railroad times, there was a thorough search made for a better crossing of the Kentucky river than the one at the mouth of Dix river, but none could be found. Twenty-three years ago that corporation attempted to bridge the chasm but failed for lack of means. The late John A. Roebling had the contract to put a suspension bridge across, after his own design, but funds gave out, and after spending $100,000 in the erection of towers and anchorage, the work was abandoned. The span was to be 1,236 feet long and about 275 feet above the river. The Southern road passes between these towers but they are useless, except for ornament. The idea of a suspension bridge there is now condemned by the best engineers. South of the Kentucky river the country is moderately rolling, with a good stretch of favorable ground, and fine productive country, until we pass the limit of the blue grass region of Kentucky, where we encounter a range of hills corresponding to Muldrough's hill, on the Louisville and Nashville Railroad. This hill extends from Portsmouth, Ohio, southward, to the eastern boundary of Madison county, Kentucky, thence westward, across Madison, Garrard and Lincoln counties, to the vicinity of Hustonville, then bearing northward to the Lebanon Branch Railroad; it follows that road westward nearly to Lebanon, and below Lebanon continues along the Rolling Fork and Salt river to the Ohio, and up that river, on the west side to New Albany, and thence northward into the state of Indiana. It is almost everywhere an abrupt lift in the country of from 200 to 400 feet.

After passing this range of hills, we cross a belt of country similar to that along the Louisville and Nashville Railroad from Elizabethtown to Bowling Green, and to that known as the highlands, in Tennessee. It is a continuation of the same geological formation.

The character of this region is irregular—often smooth for considerable distances,

and sometimes broken up by heavy drainage, especially by the wide and deep valleys of the Cumberland river and its tributaries. The south-eastern boundary of these highlands is the north-western outline of the Cumberland Mountains. It begins at the Big Hill, in Madison county, Kentucky, and extends, with very irregular outline, near Mount Vernon, south-east of Somerset, Monticello and Albany, in Kentucky, and of Livingston, Cookville and Sparta, in Tennessee. From the Kentucky to the Cumberland is sixty-four and three-tenth miles, on ten miles of which the work is very heavy, on the rest comparatively light. The direction and alignment are very fair, and with the grade of fifty-two and eight-tenths feet per mile, it will make a very good road. There are, however, very large bridges over both the Kentucky and Cumberland rivers. These streams lie in deep gorges, about 1,100 feet wide, with bold, limestone cliffs. Their channels occupy about two-fifths of the chasms and the rest is an alluvial bottom, about fifty feet above low water.

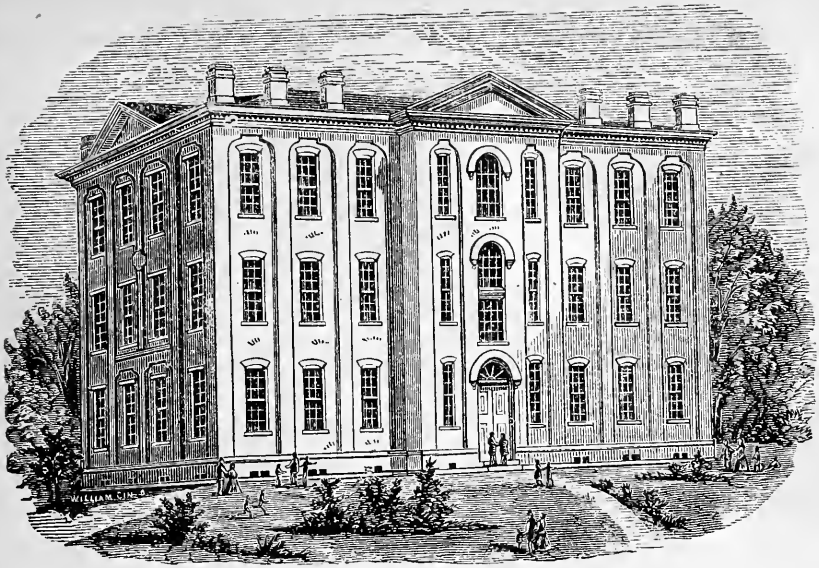
The water rises fifty-five feet in the Kentucky and seventy-two in the Cumberland; probably higher in the latter than in any other river in this country. The same stream rises only fifty feet at Nashville 500 miles below. But to return to our stopping place. Mercer county is one of the nine counties erected by the Legislature of Virginia, before Kentucky was separated and admitted into the Union, the first formed out of Lincoln county and the sixth in numerical; was established in 1785, and named in honor of Gen. Hugh Mercer. It is situated very near to, if indeed it does not embrace within its limits, the exact geographic center of the state; on the waters of both the Kentucky and Salt rivers, and is bounded, north by Anderson and Woodford, east by Woodford, Jessamine and Garrard, south by Boyle, and west by Washington and Anderson counties. Dix's and Kentucky rivers form the entire eastern boundary line; Salt river runs centrally through the county from south to north; other streams in Mercer county are Chaplin's, Jennings, Rocky, McConn's Lyons' and Thompson's creeks, and Shawnee run. The surface is undulating, and the land generally of a good quality, some of it very rich, and the whole is finely watered. Mercer is still a heavy grain growing and stock raising country, and before Boyle was stricken off produced a much larger quantity of corn than any other county in the State; it now ranks the fourth county in wheat growing. In 1840 Mercer gathered 3,397,406 bushels of corn, while Harrison, the next highest, gathered but little more than half as much—1,716,484 bushels—but in 1870 Mercer and Boyle combined produced only 768,624 bushels.

This county, being settled at the very earliest period of the history of Kentucky, has been finely improved, and the people consist, to a large extent, of the descendents of pioneer families, who are, generally, in independent circumstances, well educated, and intelligent; the population has ranged as follows: 1790, 7,091; 1800, 9,646; 1810, 12,630; 1820, 15,587; 1830, 17,694; 1840, 18,720; 1850, 14,067; 1860, 13,701; 1870, 13,144. The county has an area of 141,992 acres, thus at present, there are over ten acres to the individual. The railway purchased 4.89 miles and was given 3.32 miles, showing the legth of the road 8.21 miles through the county, which also subscribed, or rather donated, $1,900. The crops for 1870 were as follows: 24,565 pounds of hemp, 1918 tons of Hay, 463, 884 bushels of corn, 172,987 bushels of wheat, 530 bushels of barley. The county also contained, in the same year, 4,352 horses, 824 mules, 4,869 cattle, 15,000 hogs. Land was valued at $14.32 per acre in 1846, $20.45 in 1870; the taxable property in the county in 1846 amounted to $4,026,469; in 1870 to $4,129,231. The largest number of slaves ever held, which was in 1840, was 5,286.

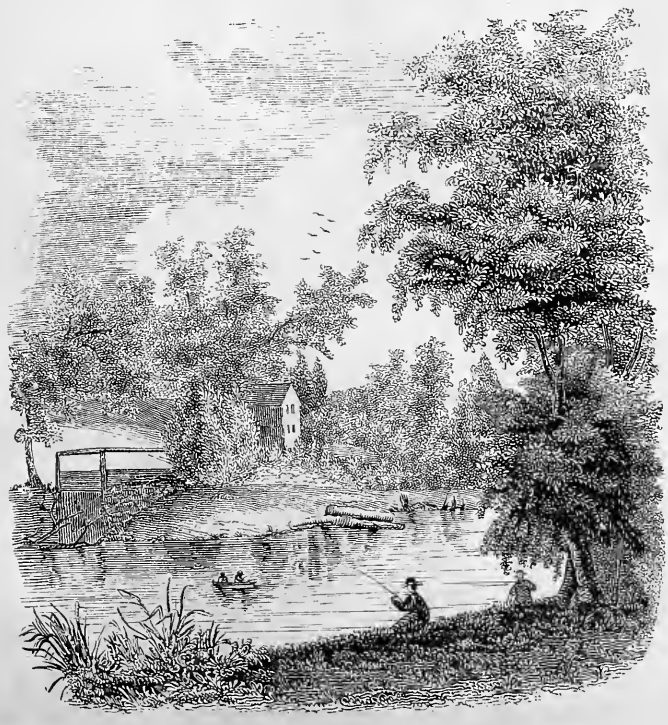
The first station in this county, on our route, is

PLEASANT HILL or UNION VILLAGE.

This is a small place of rare beauty and neatness, situated on a commanding eminence, about one mile from the Kentucky river, on the turnpike from Lexington to Harrodsburg, and seven miles from the latter place. It belongs exclusively to that orderly and industrious society called "Shakers," so called from the shaking in their dancing, and contained in 1870 a population of 362, divided into families of from sixty to eighty each. Their remarkable steadiness and permanence is well illustrated by the fact that they numbered 298 in 1810, and 342 in 1050, an increase of forty-four in 40 years, while in the next twenty years the increase was just twenty; or a small fraction over one per year for sixty years. Their main edifice is a large, handsome, and costly structure, built of Kentucky marble; the others, generally, are built of brick, and all admirably arranged for comfort and convenience. The internal and external arrangement and neatness of their dwellings, the beauty and luxuriance of their gardens and fields, the method and economy displayed in their manufacturing and mechanical establishments, their orderly and flourishing schools, their sleek and well fed stock, are all characteristic of this singular people, and evidence of a high degree of comfort and prosperity. Every important family arrangement is gov-



HIGH SCHOOL BUILDING, FRANKFORT, KY.



VIEW OF BANKLICK, KENTON CO., KY.

erned by the clock, and moves on with the harmony and regularity of clock-work, in beautiful order. They are always instructed to be very industrious, and to bring in according to their ability to keep up the meeting. They vary in their exercises; their heavy dancing, as it is called, is performed by a perpetual springing from the floor, about four inches up and down, both in the men's and women's apartment, moving about with extraordinary transport, singing sometimes one at a time, sometimes more, making a perfect charm. This elevation affects the nerves so that they have intervals of shuddering as if they were in a strong fit of the ague. They sometimes clap hands, and leap so as to strike the joist above their heads. They throw off their outside garments in these exercises, and spend their strength very cheerfully in this way. Their chief speaker often calls for their attention; then they all stop and hear some harrangue, and then fall to dancing again. They assert that their dancing is the token of the great joy and happiness of the new Jerusalem state, and denotes the victory over sin. One of the postures, which increase among them, is turning around very swiftly for an hour or two, this, they say, is to show the great power of God. They sometimes fall on their knees and make a sound like the roaring of many waters, in groans and cries to God, as they say, for the wicked world who persecute them. In 1828 the number of so-called societies were sixteen; the number of preachers about forty-five; members gathered into their societies, about 4,500; those not received, 900; making in all 5,400.

Their location is very charming. The scenery on Kentucky and Dix rivers is among the grandest and most picturesque in the United States. Next to the Highlands of the Hudson, it is probably unequaled for its imposing effect. Those lowering cliffs, rising in perpendicular walls for many hundred feet above the beach, varigated by marble strata of every conceivable thickness and color, overpower the beholder with a sense of nature's majesty. They look like the battlements of a world, standing there so stern and erect in their massive proportions, and as we gaze on their bold fronts, against which the storms of ages have beaten, we can almost realize the fable of the Titans and suppose they have been thrown up in some long forgotten battle of the Gods.

An incident occurred at Shaker Ferry, in 1845, nearly opposite the most elevated of these cliffs, which shows that men sometimes bear a charmed life. A stranger from Connecticut, believed to be an artist, was seen in the neighborhood for several days—his object unknown. A short time before the hour of dinner, in the month of June or July, while the occupants of a little cabin on the left bank of the river was engaged in his cornfield on the bottom immediately opposite the ferry, his attention was attracted by a rattling noise above him, and, looking up, he saw a man falling down the fearful precipice—now touching and grasping at a twig, now at a root, without being able to arrest his descent. He finally lodged in the top of a small buckeye tree, about fifty feet above the general level of the bottom. The total distance of the fall was 170 feet, and from the last point he touched the rock, to the top of the tree, was forty-five feet. The next day he was walking about apparently but little injured.

ANCIENT TOWNS AND FORTIFICATIONS.

There are two of these in Mercer county, both on Salt river, one about four miles above Harrodsburg, containing ditches and a mound some ten or twelve feet high, filled with human bones and broken pieces of crockery ware. On one side of the mound a hickory tree, about two feet in diameter, grew, and was blown up by its roots, making a hole some three or four feet deep. Its lower roots drew up a large piece of crockery ware, which had been on some fire coals—the handle was attached to it, and human hair lay by the coals. This was probably a place of human sacrifice. The other ruins are about a mile and a half above, both being on the west side of the river. There is no mound near this, but only the remains of earth dug out of the ditches. Each place is of a quadrangular form. There are also remains of Indian villages on and near Salt river, and close by petrified muscle shells, conglomerated into large lumps of rocks, exist, and generally some two feet of soil covers them, showing many years of abandonment. One of these is on Gen. R. B. McAfee's plantation, four miles north-west of Harrodsburg, near a large cave spring

Gen. Hugh Mercer, of Virginia, from whom this county received its name, was a native of Scotland, and graduated at an early age in the science of medicine. At the memorable battle of Culloden, he acted as assistant surgeon, and, with many of the vanquished, sought a refuge in America. In the Indian war of 1755 he served as a captain under Washington. For his gallantry and military skill in the war, the corporation of Philadelphia presented him an appropriate medal. In 1775 he was in command of three regiments of minute men, and in 1776 was made colonel in the army of Virginia. Having joined the Continental army, he was promoted to the rank of brigadier-general and served

in that capacity with efficiency and distinction, until his death, which occurred in the battle of Princeton, where he fell mortally wounded, while leading the vanguard of the American forces. He survived nine days.

BATTLE OF THE BOARDS.—About 1783, when the Indians still roved through the dense forests, plundering and murdering the white inhabitants, three men left Harrod's Station, in this county, to search for horses which had strayed off. They pursued the trail through the rich pea vine and cane for some miles. Frequently they saw signs of Indians in their vicinity, hence, moved with cautious steps. They continued the search until darkness and a cold rain drove them to take shelter in an old deserted log cabin, thickly surrounded by cane, and matted over with grape vines. They determined not to strike a fire, as the Indians knew the location of the cabin, and, like themselves, might seek its friendly shelter and dispute their right to possession. They concluded to ascend into the loft of the cabin, the floor of which was clap-boards, resting upon round poles. In their novel possession they lay down quietly side by side, each man holding his trusty rifle in his arms. They had not been in this perilous position long, when six well armed Indians entered the cabin, placed their guns and other implements of war and hunting, in a corner, struck a light and began to make the usual demonstrations of joy on such occasions. One of our heroes determining to know the number of the Indians; he was the middle man of the three, and, lying on his back, as hilarity and mirth grew noisier, attempted to turn over and get a peep at things below. His comrades held him to keep him from turning over. In the struggle one of the poles broke, and, with a tremendous crash, the clap-boards and the men fell into the midst of the affrighted Indians, who, with a yell of terror, fled from the house, leaving their guns and never returned. The scarcely less terrified whites remained in quiet possession of the cabin, and, in the morning, returned to the station with their trophies. Whenever the three heroes met in after life, they laughed immoderately over their strange deliverance, and what they called "The Battle of the Boards."

GEN. RAY, A SCOTCHMAN, AND A BAND OF INDIANS.—The following thrilling adventure is preserved in the "Autobiography of Dr. J. J. Polk," recently published.

"Do you see that old gray-headed man, now slightly bent by toil and years? Look at his piercing black eyes, his stalwart form, broad shoulders and arms yet capable of inflicting heavy blows. You see him surrounded by a company of men, all in breathless silence. Listen to his shrill feminine voice. He was a pioneer and a great Indian warrior, in the early settlement of Kentucky. His name is Ray, Gen. James Ray. He is engaged in telling a thrilling incident connected with his early life. Listen to his story: "When the most of you were boys, I lived in Harrod's fort, one mile east of where we now sit. The inhabitants of the fort had planted a small field of corn, protecting it with a brush fence. The field was about three hundred yards long and two hundred wide. One beautiful summer morning an old Scotchman took his horse and went out to the field to plow the patch of corn. He had not been out long when I took my trusty rifle and sallied out. I had seen signs of Indians about the evening before, so I made it a point to call on the old Scotchman and see if all was well. As I approached the field, I saw, about two hundred yards in advance, and between me and the field, a tall well armed Indian. He kept a tree between him and the Scotchman, when the latter was plowing toward him; then he moved nearer, as the Scotchman went toward the other end of the field. This maneuver the savage performed three different times. Each time as the Indian advanced on the Scotchman I advanced on the Indian, until he was not more than fifty yards from his intended victim. I saw the Indian attempt to level his rifle, then, quick as thought, I let off my old trusty Bessie. At its sound the Indian sprang forward discharging his rifle as he fell, but without effect. The Scotchman let go the handles of the plow, and ran with such force as to make a breach in the brush fence. I called to him several times, which seemed only to increase his speed. I followed and when I arrived at the fort he was telling about his escape from a whole band of Indians. I explained the affair, but they would not believe me until I conducted them to the field and gave them a full account. We took the dead Indian's scalp and returned in triumph to the fort."

During the last war with Great Britain, a very remarkable circumstance occurred in connection with the invasion of Canada by the Kentucky troops, which, from its singularity, merits preservation. A company of volunteers, destined for Shelby's army, rendezvoused at Harrodsburg, Mercer county, and formed a nucelus around which the military recruits of the county gathered, obtaining fresh accessions of strength with their progress toward the Ohio. When they marched from Harrodsburg, the county-seat, about a mile or two out, they saw two pigs fighting, and delayed their march to see it out. When the march was recommenced, it was observed that the victorious pig was following in the route, and, at night, when they encamped, the animal also hunted itself a shelter, and halted for the night. The following day the pig accompanied the troops as before, and thus night and morning, in their progress toward the river, the animal halted, rested and started onward, when they resumed their journey. When they came opposite Cincinnati, at which

place they crossed in a ferry boat, the pig, on getting to the waters edge, promptly plunged in, waiting on the other side until the whole cortege crossed over, and resumed its post as customary in the flank of the moving column. In this way the animal kept on with the troops, until they got to the lake. On the whole journey as the men grew more familiar with their comrade, it became a pet, receiving a full share of the rations issued to the soldiers, and, destitute as the troops found themselves at times of sustenance, no one thought of putting the knife to the throat of their fellow soldier. What they had was still shared, and if the pig fared at times as scantily as the rest, it grunted on and manifested as much patriotism in its own line, as the bipeds it accompanied in theirs At the margin of the lake she embarked with the troops and went as far as Bass Island. She was then offered a passage into Canada, but obstinately refused to embark a second time. Some of the men attributed her conduct to constitutional principles, and observed that she knew it was contrary to the constitution to force a military pig over the line. In consequence of this remark they gave her leave to remain. After the campaign had closed, the troops recrossed the lake, having left their horses on the American side. As soon as the line was formed, to the great surprise of all, and inspiring a deep interest in many, there was the pig on the right of the line, ready to resume her march with the rest. By this time the winter frosts had set in, and the animal suffered greatly on its homeward march. It made out, however, to reach Maysville, at which point the troops recrossed the Ohio river. There it gave out, and was placed in trusty hands by Gov. Shelby, and finally taken to the Governor's home, where the animal passed the rest of its days in ease and indolence. The facts contained in this narrative are strictly true and can be attested by many living witnesses.

BOYLE COUNTY, the next in our trip, was the ninety-fourth in order of organization in the State; it was formed in 1842, after a struggle in the Legislature for about thirty years, out of parts of Mercer and Lincoln counties, and named in honor of ex-chief justice John Boyle. It is bounded on the north by Mercer county, east by Garrard, south by Casey and Lincoln, and west by Marion. The soil, generally, is very deep and rich, and lies well for cultivation. The population of the county ranged as follows: 1850, 9,116; 1860, 9,304; 1870, 9,515; its area is 100,517 acres, being, at present, about ten acres to the individual. Boyle county donated to the Cincinnati Southern Railway 10.5 miles of "right of way," which is the entire distance through the county. The highest number of slaves ever held in the county, which was in 1850, was 3,424, valued at $1,369,600. Land was worth in 1846, $12.22, and 1870, $24.66 per acre. The crops in 1870 were as follows: 3,100 pounds of tobacco, 196,900 pounds of hemp, 1,796 tons of hay, 304,740 bushels of corn, 109,052 bushels of wheat. 3,400 bushels of barley; the live stock was 2,865 horses, 1,250 mules, 4,705 cattle, 10,000 hogs. The tax valuation in 1846 was $3,853,123; in 1870, $4,123,535.

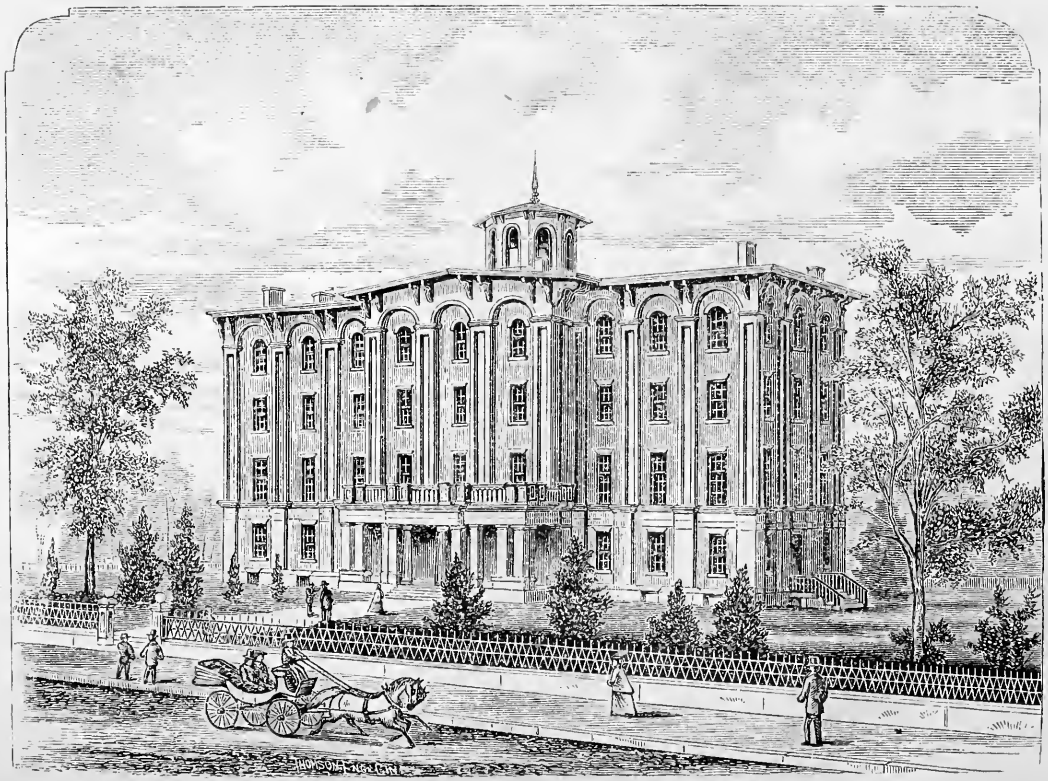
THE KENTUCKY INSTITUTION FOR THE DEAF AND DUMB, OR DEAF AND DUMB ASYLUM.—The fourth in order of time in the United States, was established at Danville, by act of the Legislature, of January 7, 1823, and went into operation April 23d following. The Legislature appropriated $3,000 to aid in its establishment, $100 for each pupil, and in 1823 $3,000 towards buildings. In 1852 $3,000 per annum was appropriated for the support of the institution, and in 1865 this was increased to $6,000; which, with $200 annually for clothing for the indigent, and $140 for each pupil, embraces the present annual expense of this great charity. Prior to 1836 the number of pupils receiving State aid was limited to twenty-five, then to thirty, then to thirty-five; after 1850 all mutes in the State, of proper age, were allowed to be received.

In 1826, at the instance of Thos. P. Moore, representative from the Danville district, Congress appropriated a township of land in Florida to the benefit of the asylum. The proceeds of that land, judiciously invested, and of a donation in 1850 of $1,000, by Capt. James Strode McGowan, of Montgomery county, created a "permanent fund," or endowment of $28,100, as per reports of 1870 and 1871.

This institution was first taught in an old frame building on Main street, in Danville. Now, upon grounds of fifty acres or more in the edge of that place, there are four large and several smaller buildings, which have cost about $70,000. The principal building, erected in 1855, is an elegant and substantial one, 107 feet long, sixty-four feet wide, and four stories high above the basement; in the Italian style of architecture. The chapel building is fifty feet long by thirty-two wide. The State appropriated, in 1860 $10,000, and previously $17,500 for building purposes. The rest of these excellent buildings is due partly to donations from the late John A. Jacobs, but still more to his extraordinary financial skill and unselfish devotion to the institution. Rev. John R. Kerr was the first superintendent. John A. Jacobs was made principal in 1825, at the age of nineteen, and continued until his death, in 1869—forty-four years. Rev. Saml. B. Cheek became a teacher in 1851, and continued until his death—May 10, 1869—eighteen years, most of which time he was vice-principal. John A. Jacobs, jr., who has been connected with the insti-

tution as assistant teacher, or teacher, most of the time since 1860, was made principal Nov. 28, 1869, on the death of his uncle. The number of pupils in 1845 was forty-one; in 1850, sixty; in 1851, seventy; in 1855, eighty-one; in 1863, 73; in 1867, ninety-six; in 1871, ninety-eight; total from 1823 to Nov. 13, 1871, 564, of which 334 were males, 230 females. Of these, eighty were pay pupils, from thirteen other States. In 1847 two were taught to speak; but subsequent experience proved that teaching pupils to speak was at the expense of more substantial education, and their voices were harsh or squeaking, and could not be modulated. The commissioners' returns showed that in 1849–50 there were 354 deaf and dumb persons in the State, of whom only seventy or one-fifth had ever enjoyed the advantages of education and training at the asylum. The returns for the year 1853–4–5–6 showed about 700 deaf mutes in the State, of whom 131 were or had been in the asylum. The State of Kentucky has made provision for the board and education of every deaf mute in its borders, in good health and of proper age, from ten to thirty years. Pupils thus supported by the State are expected to remain five years, and may, if of good talent and industry, be continued two years longer. They must be plainly but comfortably clothed by their parents or friends, except in extreme cases. The session of schooling includes the whole year, except August and September. When not in school or recreation, the boys are employed at gardening or other work, and the girls at sewing and housekeeping. In school they are taught reading, writing, arithmetic, English grammar, history of Rome, Greece, United States—universal and natural—original composition, Scripture lessons, in books and by lectures, on physical geography, chemistry and natural philosophy, all beautifully graduated and designed to cultivate the intellect and heart. Pupils from other States, for $150 per session of ten months, have all the privileges of the institution. While the state makes such noble provision for the unfortunate deaf and dumb, it is the duty of parents and guardians to send them here.

CENTRE COLLEGE is located in Danville, a pleasant town near the center of the State, with a very intelligent population. The college was chartered by the Legislature of Kentucky in 1819. Jeremiah Chamberlain, D. D., the first president, went into office in 1823. In 1824 the board of trustees, according to an arrangement with the Presbyterian synod of Kentucky, procured an act of the Legislature modifying its charter so as to secure to the synod, on its payment of $20,000 to the fund of the institution, the right of appointing the board of trustees. This condition having, in 1830, been completely fulfilled on the part of the synod, all the members of the board have, since that period, been appointed by the synod, as their terms of office, from time to time, have expired. One-third of the board are appointed each year. Dr. Chamberlain resigned his office in 1826, and the Rev. Gideon Blackburn, D. D., succeeded him in 1827, the office having in the meantime been filled, temporarily, by the Rev. David C. Proctor. On the resignation of Dr. Blackburn, in 1830, Rev. John C. Young, D. D., was elected serving with great success for twenty-seven years, until his death, June 23, 1857. Rev. Lewis W. Green, D. D., the first graduate of the college in 1824, was chosen his successor. August 6, 1857, and inducted into office January 1, 1858, serving until his death, May 26, 1863. Rev. Wm. L. Breckenridge, D. D., was the next president, October 15, 1863, during the trying times of the late civil war and which followed its close, and during the troubles as to the control of the college. He resigned October 16, 1868. Professor Ormand Beatty, L. L. D., was made president, *pro tem.*, and, June 26, 1872, inaugurated as president. In the earlier period of its existence, the number of its students ranged from fifty to 110, falling in 1830 to only thirty-three in both grammar school and college. The number steadily increased, reaching 220 in 1855, and 253 in 1860. In college proper, the number 173 in 1855; 187 in 1857; 188 in 1860; 173 in 1861; falling very low during and for five years after the late war, and in 1871 rising to seventy-two. The number of graduates was forty-one during the ten years from 1824 to 1834; 117 in the next decade, 1834 to 1844; 238 in 1844 to 1854; 267 in 1854 to 1864; and seventy-seven in the eight years from 1864 to 1871. The largest graduating classes were forty-seven in 1857; thirty-five in 1860; thirty-four in 1848, and thirty-three in 1846: the smallest, since 1837, was four in 1869; six in 1870; seven in 1871, and nine in 1868. The total number of alumni to 1871 was 740; an average of a little over fifteen per year. Of these 163 became ministers of the Gospel and more than 300 lawyers. The endowment in 1871 was about $105,000. In 1859 the sum of $50,000 was raised under the direction of the synod of Kentucky, for the erection of additional college buildings, which, in consequence of the war, was delayed. An elegant new college building, much the finest in the State, was finished and dedicated with great enthusiasm on June 26, 1872. A handsome library building was erected several years ago, by the liberality of the late David A. Sayre, of Lexington. The college library contains over 2,000 volumes, and the libraries of the two literary societies, about 3,500. Since the disruption of the Presbyterian church, in 1866. The Southern Presbyterians have been ousted altogether from the board of trustees, and the exclusive control of the college is in the hands of trustees belonging to the Presbyterian church, in connection with the General Assembly of the North.



DEAF AND DUMB ASYLUM, DANVILLE, KY.

First Cabin in Boyle County.—Col. James Harrod built a cabin in what is now Danville, on the very spot, in the edge of the graveyard, where for many years, until recently, stood the old stone meeting-house, erected as a Presbyterian church over fifty-three years ago, and for nearly forty years past occupied as an African church. The old fort was built upon the same spot, and afterward a Presbyterian church and a college or county seminary, were built in connection upon the site of the fort, with a graveyard all around it. This house, and others in the town, were blown down in 1819, by a great tornado. Like the fort, it was on a bluff, or bench of rocks, beneath which the "town spring" burst out, flush and free. This spring was the center of the town survey, and where the old man Thomas Allen, who originally laid out the town of Harrodsburg, and who, by the by, was the first clerk of a court in Kentucky, re-surveyed it and planted the corner stones, he set his "Jacob's Staff" in the center of the spring, under the projecting rocks, as a starting point. The venerable Dr. Christopher C. Graham, still living—in his eighty-seventh year—was present, and aided in the survey. He was assured by his father—an early and valuable associate of Boone and Harrod—that the cabin above mentioned, was among the first built in the State; that the first was in Harrodsburg, built by Col. Jas. Harrod, in the fall of 1773.

The first town on our route, after entering this county, is

DANVILLE.

We have already made mention of this place in connection with the institutions we have just described. It is the county-seat and is three miles west of Dix river, thirty-six miles south from Lexington, and forty miles south-west from Frankfort, and near the geographical center of the State; has a new court house, ten churches, several banks, Center College, Danville Collegiate Institute, Caldwell Female Institute, and the Kentucky Deaf and Dumb Asylum; is the center of a wealthy and intelligent population, and a place of considerable business; established by the Virginia Legislature in 1787, and laid out by Walker Daniel. The population has ranged as follows: 1790, 150; 1810, 432; 1830, 849; 1840, 1,223; 1870, 2,542, and fully 3,000 in 1876.

SHELBY CITY.

Called also South Danville, or Danville Station. At the intersection of the Cincinnati Southern Railway and the Lebanon Branch of the Louisville and Nashville Railroad; is five miles south of Danville; population in 1870, 223; present 300. Being at the crossing of the two railroads, one or both of which are important routes, there will be considerable shipping, reshipping, switching, &c.; lying also in a wealthy country, this place will, beyond doubt, grow rapidly, and some day become an important point on the road. Still forward we come to Lincoln county, which was formed in 1780, and was one of the three original counties organized in the district of Kentucky by the Legislature of Virginia. It was named in honor of Gen. Benj. Lincoln, a distinguished officer of the revolutionary army. The original territory of Lincoln, which comprised nearly one-third of the State, has been reduced, by the formation of new counties, to comparatively small dimensions; but it is still a compact and well formed county. Bounded on the north by Garrard and Boyle, east by Garrard and Rockcastle, south by Pulaski, and west by Casey The exports of the county are horses, mules, cattle, hogs and wool; while wheat, corn, oats and rye are extensively cultivated. The population ranged as follows: 6,548 in 1790; 8,621 in 1800; 8,676 in 1810; 9,973 in 1820; 11,002 in 1830; 10,187 in 1840; 10,093 in 1850; 10,647 in 1860; 10,847 in 1870. The number of acres is 175,991, showing about sixteen acres to the individual. The highest number of slaves ever held, in 1840, was 3,450, worth $1,380,000. Lincoln county donated 14.98 miles of "right of way" to the road, the balance, 8.90 miles, was purchased. The total distance through the county is 23.88 miles. The crops for 1870 were 18,145 pounds of tobacco, 70 pounds of hemp, 2,673 tons of hay, 362,903 bushels of corn, 63,503 bushels of wheat; the stock for the same year was 3,621 horses, 1,457 mules, 8,199 cattle, and 15,000 hogs. The tax valuation was $3,490,144 in 1846, and $4,483,920 in 1870. Land was worth, per acre, $9.26 in 1846; $17.21 in 1870. Corn was raised in 1775 in this county by Benj. Logan and Wm. Gillespie. On the highlands, where they are capped with the sub-carboniferous limestone, there are some good farming lands, but where the country is lower and the surface is in the Devonean Shales, it is poor, being the same as the Barrens, further west in the State, and at some points on the highlands in Tennessee. The Pioneer Stations, in the boundaries of the present Lincoln county, exceed in number those of any other county. Gen. Benj. Lincoln, in honor of whom this county received its name, was a native of Massachusetts, and an eminent American revolutionary general. In 1776, when he had attained his forty-second year, the Council of Massachusetts appointed him a brigadier-general, and soon after a major-general of militia. Con-

gress subsequently, at the recommendation of Gen. Washington, conferred on him the appointment of major-general of the Continental forces. He served as second in command under Gen. Gates, at the capture of Burgoyne's army, where he was severely wounded. In 1778 he was appointed by Congress to conduct the war in the Southern States. He continued in command of the southern army until the capture of Charleston, in 1780, where he was made a prisoner of war. In 1781, having been previously exchanged, he commanded a division at Yorktown, and was honored by Gen. Washington with the office of receiving and directing the distribution of the conquered troops. It October of the same year, he was appointed by Congress Secretary of war, which situation he held until 1784, when he retired to his farm. He was afterwards instrumental in suppressing "Shay's Insurrection," in Massachusetts, and filled several important appointments under the national and State governments. He was also a member of several learned societies. He died in 1810, aged 77 years.

THE KNOB LICKS, in this county, is a locality of some curiosity. What are called knobs, are detached hills of a soft clay slate formation, in some instances the slate having been decomposed and abraded to a considerable depth by the action of the elements, leaving large hollows on the side of the hills, intersected in every direction with ravines, and entirely destitute of vegetation. The greatest height of these knobs is about 200 feet, and the highest has a base of about 150 yards in diameter.

In the year 1775 Col. Benj. Logan arrived at St. Asaph's, about a mile west of the present town of Stanford, and established a fort, called Logan's fort. On the 20th of May, 1777, this fort was surrounded by a band of 100 Indians, and, on the morning of that day, as some of the females belonging to it were engaged outside of the gate, in milking the cows, the men who acted as guard for the occasion, were fired upon by a party of Indians, who had concealed themselves in a thick canebrake. One man was shot dead, another mortally wounded, and a third so badly as to be disabled from making his escape, while the remainder made good their retreat into the fort and closed the gate. Harrison, one of the wounded men, by a violent exertion, ran a few paces and fell. His struggles and exclamations attracted the notice and awakened the sympathies of the inmates of the station, The frantic grief of his wife gave additional interest to the scene. The enemy forbore to fire upon him, doubtless from the supposition that some of the garrison would attempt to save him, in which event they were prepared to fire upon them from the canebrake. The case was a trying one, and there was a strong conflict between sympathy and duty on the part of the garrison. The number of effective men had been reduced from fifteen to twelve, and it was exceedingly hazardous to put the lives of any of this small number in jeopardy; yet the lamentations of his family were so distressing, and the scene altogether so moving, as to call forth a resolute determination to save him if possible. Logan always alive to the impulses of humanity, and insensible to fear, volunteered his services, and appealed to some of his men to accompany him. But so appalling was the danger that all at first refused. At length John Martin consented, and rushed with Logan from the fort; but he had not gone far before he shrank from the imminence of the danger, and sprang back within the gate. Logan paused for a moment, then dashed on alone and undaunted; reached unhurt the spot where Harrison lay; threw him on his shoulder and, amidst a tremendous shower of rifle balls, made a safe and triumphant retreat into the fort. The fort was now vigorously assaulted by the Indian forces, and as vigorously defended by the garrison. The men were constantly at their posts, whilst the women were actively engaged in moulding bullets. But the weakness of the garrison was not their only grievance. The scarcity of powder and ball, one of the greatest inconveniences to which the settlers were not unfrequently exposed, began to be now seriously felt. There were no indications that the siege would be speedily abandoned; and a protracted resistance seemed impracticable, without an additional supply of the munitions of war. The settlements on the Holston could furnish a supply, but how was it to be obtained? And even if men could be found rash and desperate enough to undertake the journey, how improbable it was that the trip could be accomplished in time for the relief to be available. Logan again stepped forward, in this extremity, determined to take the dangerous office upon himself. Encouraging his men with the prospect of a safe and speedy return, he left the fort under cover of night, and attended by two faithful companions of his own selection, crept cautiously through the Indian lines without discovery. Shunning the ordinary route through Cumberland Gap, he moved with incredible rapidity over mountain and valley—arrived at the settlement on the Holston—procured the necessary supply of powder and lead—immediately retraced his steps, and was again in the fort in ten days from the time of his departure. He returned alone, the necessary delay in the transportation of the stores, induced him to entrust them to the charge of his companions, and his presence at St. Asaph's was all important to the safety of its inhabitants. His return inspired them with fresh courage; and, after a few days, the appearance of Col. Bowman's party, compelled the Indians to retire.

In the fall of the year 1789, Samuel Daviess, who resided in Bedford county, Virginia, moved with his family to Kentucky, and lived for a time at Whitley's Station, in Lincoln. He subsequently moved to a place called Gilmer's Lick, some six or seven miles distant from said station, where he built a cabin, cleared some land, which he put in corn next season, not apprehending any danger from the Indians, although he was considered a frontier settler. But this imaginary state of security did not last long, for on a morning in the month of August, in the year 1782, having stepped from his door, he was suddenly surprised by an Indian appearing between him and the door, with tomahawk uplifted, almost within striking distance. In this unexpected condition, and being entirely unarmed, his first thought was, that by running around the house, he could enter the door in safety; but, to his surprise, in attempting to effect this object, as he approached the door, he found the house full of Indians. Being closely pursued by the Indian first mentioned, he made his way into the cornfield, where he concealed himself, with much difficulty, until the pursuing Indian had returned to the house. Unable as he was to render any relief to his family, there being five Indians, he ran with the utmost speed to the station of his brother, James Daviess, a distance of five miles. As he approached the station, his undressed condition told the tale of his distress, before he was able to tell it himself. Almost breathless, and with a faltering voice, he could only say, "his wife and children were in the hands of the Indians." Scarcely was the communication made, when he obtained a spare gun, and the five men of the station, well armed, followed him to his residence. When they arrived at the house, the Indians, as well as the family, were found to be gone, and no evidence appeared that any of the family had been killed. A search was made to find the direction they had taken, but, owing to the dryness of the ground, and the adroit manner in which they had departed, no discovery could be made. In this state of perplexity, the party being all good woodsmen, took that direction in pursuit, which they thought it most probable they would take. After going a few miles their attention was arrested by the howling of a dog, which afterwards turned out to be a house dog which had followed the family, and which the Indians had undertaken to kill, so as to avoid detection, which might happen from his occasional barking. In attempting to kill the dog, they only wounded him, which produced the howling that was heard. The noise thus heard, satisfied them that they were near the Indians, and enabled them to rush forward with the utmost impetuosity. Two of the Indians being in the rear as spies, discovering the approach of the party, ran forward where the other Indians were with the family. One of them knocked down the oldest boy, eleven years of age, and while in the act of scalping him, was fired upon, but without effect. Mrs. Daviess, seeing the agitation and alarm of the Indians, saved herself and suckling child by jumping into a sink hole. The Indians did not stand to make fight but fled in the most precipitate manner. In that way the family was rescued by nine o'clock in the morning, without the loss of a single life or injury, but that above mentioned. As soon as the boy had risen to his feet, the first words he spoke were, "curse that Indian; he has got my scalp."

After the family had been rescued, Mrs. Daviess gave the following account of the manner in which the Indians had acted. A few minutes after her husband had opened the door and stepped out of the house, four Indians rushed in, whilst the fifth, as she afterwards found out, was in pursuit of her husband. Herself and children were in bed when the Indians entered the house, one of the Indians immediately made signs, by which she understood him to enquire how far it was to the next house. With an unusual presence of mind, she raised both hands, first counting the fingers on one hand, and then the other, making a distance of eight miles. The Indians then signed to her that she must rise; she immediately got up, and as soon as she could dress herself, commenced showing them one article of clothing and then another, which pleased them very much; and in that way delayed them at the house nearly two hours. In the meantime the Indian who had been in pursuit of her husband, returned with his hands stained with poke berries, which he held up, and with some violent jestures and waving of his tomehawk, attempted to induce the belief that the stain on his hands was the blood of her husband, and that he had killed him. She was enabled at once to discover the deception, and instead of producing any alarm on her part, she was satisfied that her husband had escaped uninjured. After the savages had plundered the house of everything they could conveniently carry off with them, they started taking Mrs. Daviess and her children—seven in number—as prisoners along with them. Some of the children were too young to travel as fast as the Indians wished, and discovering, as she believed, their intention to kill such of them as could not conveniently travel, she made the two oldest boys carry them on their backs. The Indians, in starting from the house, were very careful to leave no signs of the direction they had taken, not even permitting the children to break a twig or weed as they passed along. They had not gone far before an Indian drew his knife and cut off a few inches of Mrs. Daviess' dress, so that she would not be interrupted in traveling.

Mrs. Daviess was a woman of cool, deliberate courage, and accustomed to handle the

gun, so that she could shoot well, as many of the women were in the habit of doing in those days. She had contemplated, as a last resort, that if not rescued in the course of the day, when night came on, and the Indians had fallen asleep, she would deliver herself and children by killing as many of the Indians as she could—thinking that in a night attack as many of them as remained would most probably run off. Such an attempt would now seem a species of madness; but to those who were acquainted with her, little doubt was entertained that, if the attempt had been made, it would have proved successful. The boy who had been scalped was greatly disfigured, as the hair never after grew upon that part of his head. He often wished for an opportunity to avenge himself upon the Indians for the injury he had received. Unfortunately for himself, ten years afterwards, the Indians came to the neighborhood of his fathers' and stole a number of horses. Himself and a party of men went in pursuit of them, and, after following them for some days, the Indians finding they were likely to be overtaken, placed themselves in ambush, and when their pursuers came up, killed young Daviess and one other man; so that he ultimately fell into their hands when about twenty-one years old. The next year after, the father died, his death being caused, as it was supposed, by the extraordinary efforts he made to release his family from the Indians. An act of courage previously displayed by Mrs. Daviess is calculated to exhibit her character in its true point of view. Kentucky in its early days, like most new countries, was occasionally troubled by men of abandoned character, who lived by stealing the property of others, and, after committing their depredations, retiring to their hiding places, thereby eluding the operation of the law. One of these marauders, a man of desperate character, who had committed extensive thefts from Mr. Daviess, as well as from his neighbors, was pursued by Daviess and a party whose property he had taken, in order to bring him to justice. While the party was in pursuit, the suspected individual, not knowing any one was after him, came to Daviess' house, armed with his gun and tomahawk. No person being at home but Mrs. Daviess and her children. After he had stepped into the house, Mrs. Daviess asked him if he would drink something, and, having set a bottle of whisky upon the table, requested him to help himself. The fellow, not suspecting any danger, set his gun up by the door, and while drinking, Mrs. Daviess picked it up and placing herself in the door, had the gun cocked and leveled upon him by the time he turned around, and, in a peremptory manner, ordered him to take a seat, or she would shoot him. Struck with terror and alarm, he asked what he had done. She told him he had stolen her husband's property, and that she intended to take care of him herself. In that condition she held him a prisoner until the party of men returned and took him into their possession.

Sallust says: "The actions of the Athenians, doubtless, were great, yet I believe they are somewhat less than fame would have us conceive them." Not so with the pioneers of Kentucky. But we may say of their exploits, as this author says of the actions of the Romans: "History has left a thousand of their more brilliant action unrecorded, which would have done them great honor, but for want of eloquent historians."

In the fall of 1779 Wm. Montgomery, the elder, the father-in-law of Gen. Logan, with his family and son-in-law, Jos. Russell and his family, moved from Virginia to Kentucky, and took refuge in Logan's fort. Here they remained but a few months, when, apprehending no danger from Indians, the old man, with his sons, William, John, Thomas and Robert, and his son-in-law Russell, built four log cabins on the head waters of Green River, about twelve miles in a south-west direction from Logan's fort, to which they removed in the latter part of the winter or early in the spring of 1780. They had, however, been there but a short time when the savages discovered and attacked the cabins. In one of the cabins lived Wm. Montgomery, the elder, and wife and his sons Thomas and Robert, and daughters Jane and Betsy, with two younger children, James and Flora. Mrs. Montgomery, with her youngest child, Flora, were then at Logan's fort, and Thomas and Robert were absent spying. Wm. Montgomery, jr., his wife and one child, the late Judge Thomas Montgomery, son of a former wife, and a bound boy, occupied another. John Montgomery, then but lately married, occupied a third; and Joseph Russell, his wife and three children, the fourth. These were all the white persons, but there were, besides, several slaves.

In the month of March, 1780, at night, a small body of Indians surrounded the cabins, which were built close to each other, and rather in a square. On the succeeding morning, between daylight and sunrise, Wm. Montgomery, the elder, followed by a negro boy, stepped out at the door of his cabin. They were immediately fired at and both killed, the boys head falling back on the door sill. Jane, the daughter, then a young woman, afterwards the wife of Col. Wm. Casey late of Adair county, sprang to the door, pushed out the negro's head, shut the door and called for her brother Thomas' gun. Betsey, her sister, about twelve years of age, climbed out at the chimney, which was not higher than a man's head, and took the path to Pettit's station, distant about two and a half miles. An Indian pursued her for some distance, but, being quite active, she was too fleet for him, and reached

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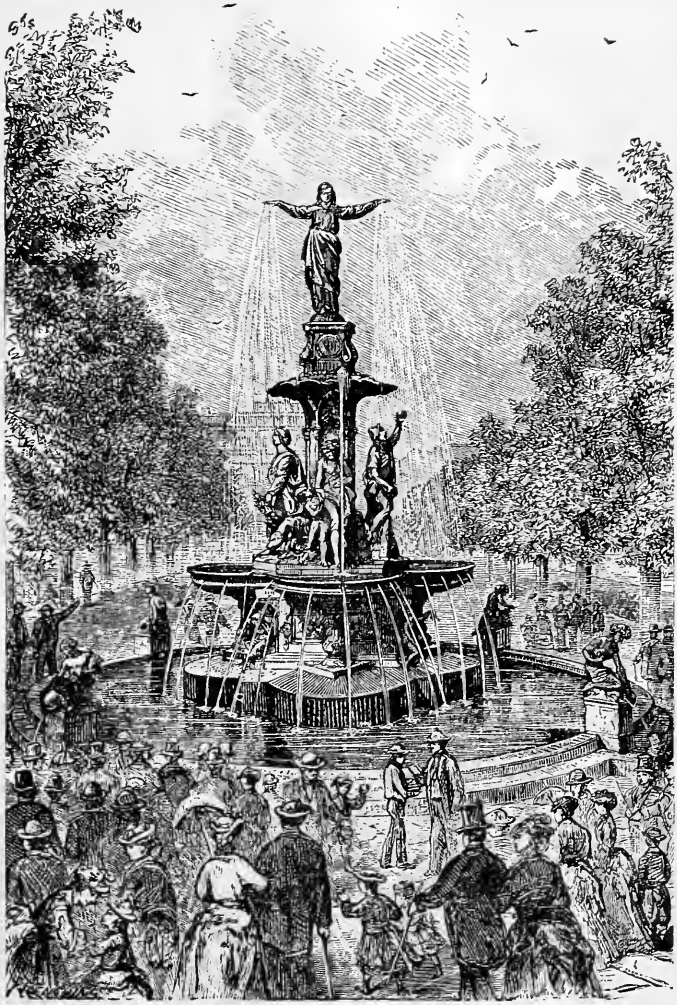

THE FOUNTAIN.

the station in safety. From Pettit's a messenger was immediately dispatched to Logan's fort. From some cause or other, probably the call of Jane for her brother's rifle, which was, perhaps, heard by the Indians, they did not attempt to break into the cabin. Wm. Montgomery, jr., on hearing the first crack of a gun, sprang to his feet, seized a large trough, which had been placed in his cabin to hold sugar water, placed it against the door and directing the apprentice boy to hold it, grasped his rifle and through a crevice over the door fired twice at the Indians, in rapid succession, before they left the ground, killing one and severely wounding another. John Montgomery was in bed, and, in attempting to rise, was fired upon through a crack, and mortally wounded, his door forced open, and his wife made prisoner. John Russell made his escape from his cabin, leaving his wife and three children to the mercy of the savages. They, with a mullato girl, were also made prisoners. The Indians commenced an early retreat, bearing off their wounded companion, and taking with them their captives, A few minutes after their departure, and when they were barely out of sight, the Indian who had pursued Betsey returned, and, being ignorant of what had occurred in his absence, mounted a large beach log and commenced hallooing. Montgomery, who had not yet ventured to open his door, again fired through the crevice, and shot him dead.

As soon as the messenger reached Logan's fort, Gen. Logan, with his horn, sounded the well-known note of alarm, when, in a few minutes, as if by magic, a company of some twelve or fifteen men, armed and equipped for battle, were at his side. They instantly commenced their march, passed the cabins where the attack had been made, and took the trail of the Indians. By the aid of some signs, which Mrs. Russell had the presence of mind to make, by occasionally breaking a twig and scattering along their route pieces of a white handkerchief, which she had torn in fragments, Logan's party found no difficulty in keeping the trail. After traveling some distance, they came upon the yellow girl, who had been tomahawked, scalped and left for dead; but who, on hearing the well-known voice of Gen. Logan, sprang to her feet, and afterwards recovered. The Indians, as was known to be their habit when expecting to be pursued, had a spy in the rear, who was discovered by Logan's party at the same instant he got his eyes upon them, and a rapid march ensued. In a few minutes they came in sight of the savages, when Logan ordered a charge, which was made with a shout, and the Indians fled with great precipitancy, leaving their wounded companion, who was quickly dispatched. A daughter of Mrs. Russell, about twelve years of age, upon hearing Logan's voice, exclaimed in extacy, "there's Uncle Ben," when the savage who had her in charge struck her dead with his tomahawk. The remainder of the prisoners were recaptured without injury. As the force of the Indians was about equal to that of the whites, Gen. Logan, now encumbered with the recaptured women and children, wisely determined to return immediately, and reached the cabins in safety before dark, on the same day. The particulars of the foregoing narrative have been received from the Montgomery family, principally from Mrs. Jane Casey, who was an actor in the drama.

SPRINGS.—The Crab Orchard neighborhood, in the eastern part of Lincoln county, is distinguished for the number, variety and excellence of its mineral springs. They were known in 1857 as 1. The two Crab Orchard springs, (Caldwell's) both chalybeate. 2. Brown's spring, chalybeate, half a mile out on the Lancaster turnpike. 3. Howard's white sulphur well, one and a half miles out on the Mt. Vernon road. 4. Epsom spring, No. 1, one mile out on the Lancaster turnpike. 5. Epsom spring, at Foley's, half a mile from the ceter of Crab Orchard, on the Fall Dick road. 6. Sowder's spring, one and a half miles out, on the north of the hill toward Dix river. 7. Bryant's springs, near Crab Orchard, seven in number, chalybeate, sulphur, etc. The "Crab Orchard Salts," obtained by carefully evaporating the water of the two Epsom, or of Sowder's springs, to dryness in iron kettles, have been sold throughout the country by druggists, and have become an officinal article; they are less drastic and more tonic than pure unmixed Epsom salts, and more likely to act on the liver in the manner of calomel, when taken in small doses. The sulphate of magnesia, epsom salt, is the principal saline ingredient of several of the springs.

The Crab Orchard Springs, as a watering place, has been forty years one of the most popular in the state. The large hotel was burned down in the spring of 1871, but, under a change of owner, new buildings were immediately erected, and in 1872 an additional large and handsome brick building, 148 feet front, with two ells, each 164 feet deep, and with over 250 rooms, to be heated by steam and lighted by gas; to be used during the scholastic year as a female boarding school, but in the summer season as a hotel.

The surface of Lincoln county is very diversified, the southern part being an elevated rolling country; the northern part is considerably lower and settled by a far wealthier community; the soil in that part being highly productive.

The railway enters this county at the north-west corner, heads the tributaries and head waters of Green river and its tributary, Hanging Fork. Strange to say the South

Fork of Green river requires a much heavier structure in crossing than the main stream, but this is caused by the nature of the ground. It is complete and stands out against the western sky in bold outlines. It is an immense structure 2,440 feet long, and eighty feet high. The iron work will last a hundred years; its appearance is at once massive, comely and beautiful. This bridge, or more properly viaduct, was built by the Louisville Bridge Company. Of the 2,440 feet of the structure, the approaches, 900 feet, are wooden trestle, and the rest, 1,540 feet, is iron It is the intention to eventually convert the wooden trestle into an embankment. From here a few miles south, there are some bad slides, more numerous and troublesome than I have seen anywhere on the road. On the whole the road has not been troubled much by this class of annoyances—not so much as we would expect, but along here the slides have an ugly look. The bridge last mentioned over the South Fork, is on section thirty-five. There is a smaller one on section fifty-three over Green river; an iron bridge 160 feet long and about twenty-five feet high. It is, as we have said before, owing to the different nature of the country, not one-tenth as large as the structure over the South Fork of the Green river just described.

On section forty-nine there is an iron trestle 180 feet long and thirty feet high. We next reach King's Mountain. Here we have the longest tunnel on the road, nearly a mile in length; the main tunnel, independent of the approaches, which are very heavy, is 4,000 feet long, through a formation of limestone, slate and shale. This is, or rather has been, one of the principal obstructions on the road, and by tunneling, the grade was reduced over one-half. The saddest part of this work is that nine men lost their lives during its progress. The road-bed through this rough country is a good one, having light grades and easy curvature. There is no town of any note or size lying on the railway in this county, but Hustonville and Waynesville lie near it. Next in order we come to Pulaski county; the twenty-seventh formed in Kentucky and the second of thirteen established in 1798, in answer to the petitions and complaints of the people living at a great distance from the court houses. Its territory was taken from Lincoln and Green counties, and it was named after Count Pulaski. Parts of Wayne county, in 1800, and Rockcastle in 1810 were taken from Pulaski. It is situated in the south middle part of the State, and bounded north by Lincoln and Rockcastle counties; east by Rockcastle, Laurel and Whitley; south by Whitley and Wayne, and west by Wayne, Russell and Casey. The northern part is gently undulating, the remainder hilly or mountainous. The Cumberland is navigable for small steamboats, during several months in the year, as high as Stigall's Ferry, and Waitsborough, and within six miles of Somerset. The other principal streams of the county are Rockcastle river, South Fork of Cumberland river, Linn, Buck, Pitman, White Oak and Fishing creeks. The staple products are corn, wheat, rye, oats and tobacco; and the principal exports, in addition, cattle, hogs and coal. The population in 1870 was 17,670, having increased but 500 in the previous decade. The area of the county is 357,251 acres, being a little over twenty acres to the individual. The highest number of slaves ever held, in 1860, 1,330, or one slave to thirteen whites. The live stock in 1870 numbered 4 313 horses, 613 mules, 11,000 cattle, and 15,000 hogs. The crops in 1870 amounted to 1,579 tons of Hay, 401,443 bushels of corn, 42,116 bushels of wheat, and 33,036 pounds of tobacco. The valuation of taxable property was in 1846, $1,264,975 and in 1870, $2,258,090. Land was valued, in the same two dates, per acre, at $2.16 and $4.14 respectively, having doubled itself nearly in twenty-four years.

The Cincinnati Southern Railway runs through this county in the longest possible direction, taking a strip at least 100 feet wide and forty-five and one-half miles in length, of which 36.77 was donated and 8.72 was sold or condemned; the county also subscribed $595.

Natural Curiosities.—Upon the line of our road, in Pulaski, fifteen miles south of Cumberland river there is a natural curiosity, which rivals in picturesqueness the Natural Bridge in Virginia. Upon a high bluff is a natural bridge, with a clear span of 100 feet, and sixty feet high. At one end of the bridge, and by a continuation of the same rock, is formed a dome fifty feet deep and extending from abutment to abutment, three hundred feet. The branches of the tallest trees extend under the edge of the dome, and a person can walk some fifty feet within its roof.

In the eastern part of Pulaski county is a valley known as the "Sinking Valley." A stream large enough to turn a mill flows underground, with occasional openings for six or seven miles. After heavy rains, the underground channel is not large enough to carry off the water, and it then flows over the surface.

There are many small caves in the county, but they have not been explored to any great depth.

Antiquities.—Several ancient burial grounds have been discovered in Pulaski, from some of which were taken bones of giant size.

Coal.—There are at least five beds of coal in the county; two of them workable, in the sub-conglomerate member of the millstone grit formation 190 to 233 feet thick. One

of these beds is three and one-half feet including a clay parting and a thin band of sulphuret of iron together about three inches thick, in another place the main vein is four and a half feet thick with the clay parting of one and one-fourth feet.

Prof. Jos. Lesley, jr., in his topographical and geological report of the Eastern Kentucky coal field, in 1859, says the main vein will yield well on both sides of the Pitman hills, furnishing a bountiful supply of fuel to the thickly populated regions to the west and north-west, which must draw its fuel from this region, as no coal of any account can be found west of Pitman's creek, owing to the rapid rise of all the strata north-westward. This rise or dip is so sudden that in a distance of only two miles, the whole 150 feet of knob stone exposed at Waitsborough, goes under water at the mouth of Pitman's creek, while the lower portion of the over-lying limestone at Pitman's creek forms the top of the high hills between Somerset and Fishing creek. The principal coal mines, and with iron mines near them, are on both sides of the South Fork of the Cumberland, near the mouth of Big Sinking creek, and on Cumberland and Rockcastle rivers, within a few miles of the mouth of the latter.

Salt was manufactured in considerable quantities, in 1846, at Fishing Creek Salt Works, five miles from Somerset.

Lead ore.—Some thin veins have been found running through the limestone at the base of Pitman's hill.

Iron ore.—A kind of gravelly iron ore is observed toward the base of the Pitman's hills, about fifteen feet above the limestone. A rich carbonate of iron occurs on the main Big Lick creek, about ninety feet above the limestone and ten feet above the McKee coal vein, showing itself in kidney shaped masses, weighing from one to thirty-five pounds, and embeded in a gray shale stratum five feet thick. Analysis showed this to contain forty per cent. of iron, with only one-tenth of one per cent. of sulphur, and with sufficient calcarious matter to flux itself. A third ore bed, supposed to be the most productive, lies near the base of the conglomerate. There are indications of an earthy iron ore, just above the main coal bed, a nine inch band at the head of No Name Branch of Live creek.

Milling power of the finest kind is furnished by Buck and Pitman's creeks and flour of superior quality is made at mills established on them, about 1855.

Newspapers, published in Pulaski county: Somerset Gazette, by John G. Bruce, 1851–60; Somerset Democrat, Barry & Bachelor, 1852–60, but for some years published by R. S. Barron & Co.; Somerset Morning Herald, by R. S. Barron, 1867–68.

Among the distinguished citizens born in Pulaski were Sherrod Williams, for six years, 1835–41, a popular member of Congress; Andrew J. James, representative in the legislature, 1855–7, and in 1872-5, secretary of State; and Dr. Galen E. Bishop, a distinguished physician, now resident in St. Joseph, Missouri.

Among the first settlers were the Praythers, the Jaspars, Pitman, John Newby, Thos. Hansford, Wm. Owens, Alex. McKenzie, Jesse Richardson, Chas. Neal and Jno. James.

The battles of mill springs and dutton hills, were fought in this county, and many skirmishes took place.

Indians had made their appearance upon our south eastern frontiers at several different times in the fall and winter of 1786. Some of the hunters had been attacked, and early in February, 1787, a man named Luttrell was killed at his own house, on Fishing creek, not far from where Somerset now stands, in Pulaski, then a part of Lincoln county. This last outrage induced Col. John Logan—in 1806 State treasurer of Kentucky, then second in command in Lincoln county—to raise his corps of militia, to range on the waters of the Cumberland and to rendezvous at or near the place where the citizen had been killed, on a branch of Green river. Within a few miles of the place of rendezvous, Col. Logan came upon the trail of the Indians who, it was supposed, had committed the murder. He followed and overtook them in the Indian Territory, killed seven and got possession of the skins, furs and horses they had, among them a valuable mare belonging to Judge Innes, a horse belonging to Mr. Blane, and also a rifle known to belong to a man who was murdered in the wilderness, on his way to Kentucky, in October, 1786. Those of this party of Indians who escaped, attempted to avail themselves, the Cherokees, with Congress, in 1785, by complaining to the Indian agent, that the people of Kentucky had intruded on their hunting ground, and murdered some of their peaceable hunters. The agent communicated this complaint to the Executive of Virginia, and the governor thereupon directed the Attorney-general of the district, Harry Innes, to "institute the proper legal enquiries for vindicating the infraction of the treaty." This vague and indefinite direction the Attorney-general refused to act under, in a letter stating this and other outrages and murders by the Cherokees; no further direction was given. The people were conscious of their innocence in all matters relating to the Indians, and extremely exasperated on receiving intelligence of the instructions to prosecute; as they were directly intended to stigmatize a highly meritorious officer, for doing what the laws of nature and God required of him.

ELIJAH DENNY, of Pulaski county, was 118 years old on Sept. 10, 1855, and as active as many men at forty; worked daily on the farm, had been an early riser all his life, never drank but one cup of coffee, and that was in 1848. He served seven years in the war of the Revolution, was wounded at the siege of Charleston, was also at the siege of Savannah, and in the battles of Eutaw Springs, Camden, King's Mountain, and Monks Corner; served under Colonels Peter Horrey and Francis Marion, and was an eye-witness of the sufferings and death of Col. Isaac Hayne, of South Carolina, an early victim of the Revolution. At that great age he was sprightly and active, and appeared to be a man of only middle age; was a strict member of the Baptist church, and rode six miles to every regular church meeting. He had four sons and five daughters, all living in 1855; the eldest in his seventy-eight year and youngest son fifty one. He was probably the last surviving soldier of those great partisan leaders, Marion, Sumter, and Horrey.

In the month of December, 1786, a body of Indians defeated a small party of whites, at the mouth of Buck creek, under the command of Capt. Hargrove. The Indians made their attack in the night, killed one man, and severely wounded Hargrove. An Indian, who had probably fired his rifle, made an onset on Capt. Hargrove with his tomahawk, and a fierce encounter ensued. Each party exerted himself to the utmost. Hargrove finally succeeded in wresting the tomahawk from the hand of the Indian, and bore it off triumphantly. In May, 1788, a party of southern Indians stole some horses near the Crab Orchard. Nathan McClure, lieutenant to Capt. Whitley, with a portion of his company, pursued the trail to the ridge between Rockcastle and Buck creek. Here he incidentally fell in with another party, and a fierce skirmish ensued. After several discharges of their guns, both parties precipitately retreated, but not until McClure was mortally, and, several of his men, slightly wounded. The loss of the Indians was not ascertained. McClure died the succeeding night in a cave, where, at his own request, he had been left, and on the next day, when a party came for him, his remains were found shockingly mangled and torn by wild beasts. He was an active officer and his loss was deeply deplored.

This county was named in honor of Count Joseph Pulaski, a distinguished Pole, who, after in vain attempting to restore the independence of his own country, entered the American service. He had followed the profession of the law, and, in 1768, was at the head of the patriots who formed the confederation of Bar. Eight noblemen only constituted the first assembly of that confederation; and of these, three were the sons and one the nephew of Pulaski. In 1771, at the head of a few accomplices, he seized the person of the King, but the latter having procured his liberation, Pulaski was condemned to death, and obliged to save himself by flight. He soon after came to America, and offered his services to the United States, against the mother country. Being appointed Brigadier-general in the American service, he served both in the northern and southern army. Oct. 9, 1779, he was mortally wounded in the attack on Savannah, and died two days afterwards. The construction of the Cincinnati Southern Railway through this county is very heavy, having many tunnels, trestles and bridges, amongst which is that spanning Cumberland river. There is nearly 5,000 feet of iron trestle, the greatest height of which is 128 feet. There is also considerable wooden trestle. The road in this county passes through ten different tunnels, the longest being 1,269 and the shortest 212 feet long; the aggregate length of all is 7,405 feet, or very nearly a mile and a half, running through solid limestone, shale, sandstone and coal. Pitman creek is spanned by a deck bridge 100 feet long; Cumberland river, beside its trestle, has also a deck bridge of three spans, each 195 feet long, costing $104.50 per lineal foot, and built by the American Bridge Co. The alignment is remarkably good for the rough country traversed; the "Board of Trustees" always using their funds liberally, if the road could be benefitted thereby; cheap railroads would perhaps have cost only one-third as much by using steep grades and fitting the hillsides very closely by sharp curves; but here both the grades and curves are as easy as they could be made. This county, as before stated, is not only rough, but having its greatest length in our route, it shows a heavy amount of work, as the road length is forty-five miles or sections.

The first nine miles was contracted for and built by McKay Bros., an old and reliable firm. The work was far more difficult than at first imagined; there were nearly 3,000 cubic yards of first-class arch masonry. In one of the cuts there were seven men buried alive—three only were recovered alive. On section sixty eight they found large pockets or strata of flint, very hard to excavate. Section eighty-two has an iron viaduct across Pitman creek, about eighty feet high. Section eighty-three has a similar structure seventy-five feet high, across Dry Branch. Omitting a tedious description of the intervening country, we come to a monster section, that of section eighty-six. In this mile are two pretty deep cuts, a very long and high iron viaduct, leading to Cumberland river bridge, the bridge and two tunnels. This is the work of the section. One tunnel is 1,165 feet long and the other 1,067, both through solid limestone and of course no support was required. The road runs out of one of these tunnels right over the river and upon a bridge

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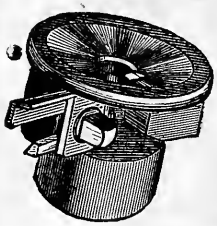
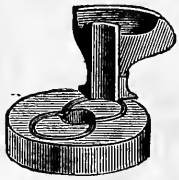
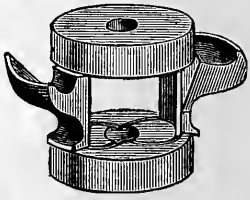

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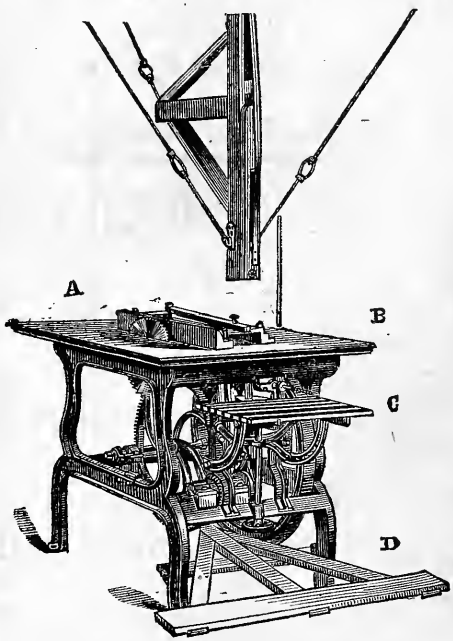

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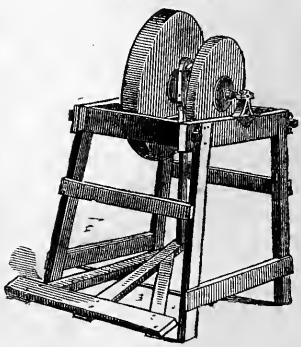

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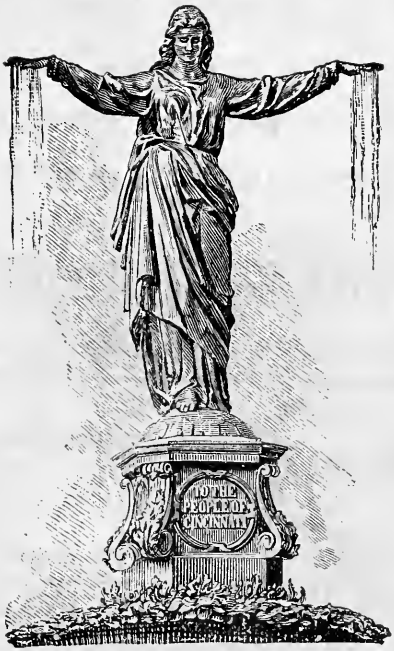
GIRL WITH BEADS.

BOY WITH LOBSTER.



THE WATER GENIUS.

GIRL WITH SHELL.

BOY WITH SKATES.

150 feet high. Between the mouth of the tunnel and the bridge there is no space. The traveler will ride out of a tunnel 1,000 feet long, on to a bridge 150 feet high. The bridge is 593 feet in length, and with the iron viaduct is 1,253 feet long.

We went around immediately over this tunnel (before its completion) and looked down upon the piers for the bridge, which shoot out of the turbulent bosom of the Cumberland. What a scene! Harper's Ferry only will compare with it; and Jefferson says in his "Notes on Virginia," to look upon Harper's Ferry is worth a journey across the Atlantic.

The masonry, some six thousand cubic yards, the bridge, and the iron viaduct was built by the Baltimore Bridge Co. The bridge is situated at Burnside Point, the head of navigation. The experience of the traveler going southward over the mile described will be this; he will ride into a tunnel over 1,000 feet long, then into a speck of daylight, interrupted by a deep cut, then into another tunnel over a thousand feet long, then on to a bridge one hundred and fifty feet high and, (with viaduct) over twelve hundred feet long, then into a deep cut. What a mile, my countrymen! In all the travelling I have ever done, nothing equals the grandeur of the scenery of this Southern Railway. Now in a tunnel, now in mid air; well, wait until you have seen it yourself, and you will say what I say now, "the half had not been told me." I have two or three times been over the route before any work was done, but I did not get an adequate idea of the stupendous nature of the undertaking after all. The most remarkable of all this road, from Cincinnati to Chattanooga, has no heavier grade than sixty feet to the mile, and no curves over six degrees. This line is, in truth, one of the great works of the century, and, in several particulars, is ahead of any road of its length in the world, as I will show further along.

The next section, eighty-seven, has an iron viaduct across Hays' branch. Section ninety-two has a tunnel 879 feet long, with a limestone roof and needs no other support. Section ninety-three has an iron viaduct across what is called Sloane's Valley; is 108 feet high and about 700 long. Ninety-four is a heavy section. There are upon it one deep cut, one deep fill, and one very high chasm crossing. At the bottom of this chasm runs McKee's branch. Here an iron viaduct 135 feet high is required, and another over Porter's branch, about seventy feet high. Section ninety-five is one of the roughest on the road; it is miserable— there is not a level yard on the whole mile. There are six cuts, four fills and three tunnels! What do you think of that for a mile of road? It fairly makes a man howl to pass over it. Of the three tunnels on this beautiful mile, one is 499 feet long, the next 1,154, and the third 212; in all, about a third of a mile of tunnel to the mile! Two of there are timbered. Of the fills, two of them are about fifty-five feet deep each. The iron viaduct is about eighty-five feet high and 200 feet long. This crosses Gum Lick branch. Reader, did you ever see or "hear tell of" such a mile of railroad? This road is a triumph over nature. Every mile of it is a monument to Cincinnati. Section ninety-six is heavy, having two deep fills, a cut and a tunnel. This tunnel is 1,296 feet long and through bituminous shale. Section ninety-seven is all cuts and fills, great and small. Two cuts and three fills are quite heavy. Section ninety-eight has one heavy cut fifty feet deep, 500 long. Section ninety-nine is also pretty tough, having seven fills and five cuts, one of which is fifty-five feet deep, 1000 feet long. Section 100 is very heavy. This mile has five cuts, four fills, two iron viaducts and a tunnel. The viaducts are across Beaver Gap and Beaver creek, and the tunnel immediately between them, which is 247 feet long, through sandstone and is timbered; the two viaducts are 500 feet long, eighty feet high and 200 feet long; 100 feet high respectively. This is a curiosity for a mile of road, is it not? Section 102 has two iron viaducts, and a deep cut, and it is a short section at that. One viaduct crosses Burnt Field branch, and the other, Indian creek. They are, respectively, seventy and eighty feet high. Section 101 has a tunnel 545 feet long, through sandstone, shale, and coal; it is timbered. Section 103 is all cut and fill, with a tunnel thrown in for variety. There is one cut through rock fifty-three feet deep, and over 1000 feet long. Between this cut and the tunnel there is a fill twenty-five feet deep, 1,200 feet long. The tunnel here is 370 feet long, through bituminous shale; it is all timbered. Sections 104–5–6 are light; 107 is heavy, with a large fill across Laurel branch. Section 108 is pretty heavy; 109 light. On section 110 we cross Bridge Fork; this stream is not large, but it requires an iron viaduct 500 feet long, and 100 feet high to span it. All these streams, large and small, cut down into the earth, requiring very high bridges to get over them.

SOMERSET

is the only town of any size lying on the railroad in this county; it is the county-seat, is nearly eighty miles south from Frankfort, and distant from the Knoxville branch of the Louisville and Nashville railroad, at four points, as follows: from Stanford thirty-three miles, Crab Orchard twenty-eight, Mt. Vernon twenty-five, and London thirty-six miles;

contains the court house, jail and clerks' offices; six churches, Baptist, Presbyterian, Methodist, Reformed and African, an excellent school-house, Masonic collegiate institute, seven dry goods stores, one hat and shoe store, one drug store, eight mechanics shops, one hotel, one carriage factory, one wagon and plough factory, one tannery, one bank with $150,000 capital, six lawyers, five physicians,; population in 1870, 587, a falling off since 1860 of seventy five, which has no doubt readded since; incorporated in 1810.

POINT BURNSIDE,

as yet only remembered by its connection with the late war, will soon build up and perhaps outstep its ancient neighbor; being at the head of navigation, lying on this new line of travel, being in a good mineral and fine agricultural country, and having a good location, this "point" will probably improve very fast. There are many beautiful caves in this county, on a small scale, some on a larger, being formed by the water gradually wearing for itself a bed between the huge masses of rock in the mountain side. I had the pleasure of many a nocturnal visit to these passages in the very bowels of the earth, sometimes alone, but often with several others in company. While a party of us were encamped in Sloane's Valley, I, as usual, commenced spying out for a crevice in the rocks, wide enough, at least, to admit our bodies, but we found nothing but one small aperture, or rough dislocation of the rocks, with the appearance of having rolled and lodged there from above. We were afraid to push through, for fear of being unable to get out again, so we pecked off the rock with a hatchet until the largest of us went through quite easily. We each had a candle, with matches, and started into the cave after supper. We soon came to a small chamber and from thence through many long and intricate passages, with overhanging stalactites and under foot stalagmites. The only wonder is that we ever found our way out again, but it only happened once that a party came after us. This is but a sample of this section of the country.

Running down through this rough land of promise, we next come to Whitley county, formed in 1818 out of the west part of Knox, and named in honor of the great Indian fighter, Col. Wm. Whitley—was the fifty-ninth in order of formation in the State. Part of its territory was taken in 1825 to help form Laurel county. It is situated in the southern border, in the south-east section of the State, lying on the Tennessee State line. It is drained by the Cumberland and its tributaries—that river winding through it for forty-five miles, in a general western course. The face of the country, except the river valleys, is hilly and broken; two spurs of the Cumberland mountain penetrating the south-east corner, to within a short distance of Williamsburg, on the Cumberland river. Corn is the staple product; cattle and hogs the principal exports of the county. The crops in 1870 were 520 tons of hay, 247,054 bushels of corn, 7,598 bushels of wheat, and 11,918 pounds of tobacco; the live stock in the same year was 1,732 horses, 247 mules, 7,625 cattle, 15,000 hogs. The population of the county nearly doubled itself in 1840–50, then made but poor progress ever since, numbering 8,278 in 1870. The highest number of slaves ever held in this county, in 1850, was 201. There are 274,953 acres, the valuation of which, per acre, was $1 42, $2.49 in 1846 and 1870, respectively. The tax valuation was, for the same period $388,332 and $985,851, being an increase of $597,519 in twenty-four years. The county donated 5 40 miles and sold 3.94 right of way.

Several good Chalybeate Springs have their source in Whitley and Pulaski counties. When tested at the fountain head, some of them were "found to contain carbonate of the protoxide of iron, with traces only of chlorides, and possessing feeble de-oxidizing properties."

The Falls of Cumberland river, in Whitley county, about fourteen miles below Williamsburg, are among the most remarkable objects in the State. The river here is precipitated over a perpendicular fall of sixty-two feet; the fall and rapid is seventy feet. On a clear morning the roar of the waters may be heard for a distance of ten or twelve miles above and below the falls. Immediately behind the falling sheet of water, there is a cave in the surface of the rock, and a person can go almost across the river by this passage through an arch formed on one side by the rock, and on the other by the flashing waters. Just below the falls large fish are to be caught in great numbers. The country, for six or eight miles above and below the falls, is very irregular and presents, to the eye of the traveler, a succession of scenery as romantic and picturesque as any in the State. The hills and mountains rise upon one another like clouds upon the horizon.

Silver ore.—The hundred years old story of Swift's silver mine has received another location on Log mountain, in Whitley county. Also in the twelve feet of shale under the conglomerate, about six feet above the foot of the Cumberland Falls above described. The statement had general circulation many years ago, that the iron ore at the Cumberland Falls was rich in silver, and a great number of persons were deluded into the purchasing of shares in a stock company which was organized for working this ore. The

excitement about the latter end of 1850 was so great that individuals in other States were induced to leave their homes in order to embark in this flattering pursuit. A Cornish miner was employed by the movers in the speculation, to extract the silver from the iron ore, and he actually exhibited five or ten cents worth of silver from his crucibles. But Prof. Owen, in his report of the geological survey, says the silver "must have been derived from either argentiferous lead, employed in large quantities to cupel or refine the metallic ingot of iron, reduced previously from the ore, or was fraudulently introduced during the process of smelting or refining, since traces of sulphuret of lead, that might be present in the ore, even if argentiferous, could not supply more than a small fraction of a grain to the ounce of ore."

THE IRON ORE at the Cumberland Falls is essentially a proto-carbonate of iron, containing 38.81 to 42 00 per cent. of iron. It is "a very good iron, approaching the so-called *black band* ore in its composition, but contains less bituminous matter; it could be quite economically smelted into a good quality of iron." Other samples of ore from the Log mountain, from the head waters of Mud creek, from the mouth of Poplar creek, and from the south part of Pine mountain, when analyzed yielded 39.20, 56.37, 37.60, and 44.53 per cent. of iron: some being so pure as to require some poorer ore to be mixed with it, to smelt it successfully, while other required only limestone to flux it.

WILLIAM WHITLEY, from whom this county received its name, was one of the most distinguished of those early pioneers, whose adventurous exploits have shed a coloring of romance over the early history of Kentucky. He was born on the 14th of August, 1749, in that part of Virginia then called Augusta, and which afterwards furnished territory for Rockbridge county. Unknown to early fame, he grew to manhood in the laborious occupation of tilling his native soil, in which his corporeal powers were fully developed, with but little mental cultivation. He possessed, however, the spirit of enterprise, and the love of independence. In 1775, having married Esther Fuller, and commenced housekeeping in a small way, with health and labor to season his bread, he said to his wife, "he heard a fine report of Kentucky, and he thought they could get their living there with less hard work." "Then, Billy, if I was you, I would go and see," was the reply. In two days he was on his way, with axe, plow, gun and kettle, and she is the woman who afterwards collected his warriors to pursue the Indians.

Whitley set out for Kentucky, accompanied by his brother-in-law, George Clark; in the wilderness they met with seven others, who joined them.

Col. Whitley was a man above the ordinary size, of great musculiar power, and capable of enduring great fatigue and privation. His courage as a soldier was unquestionable, having been foremost in seventeen battles with the Indians and one with a more civilized foe. In the battle of the Thames, he fell at the first fire. His memory is cherished throughout Kentucky with profound respect, as that uniting the characters of patriot and hero. If the reader will consult his map, he will see that we only cross a projection or L in the county. This country is a succession of highland and lowland, of mountain and valley; there is a main ridge running in a southerly direction across this L, upon which, or rather on the side of which lies our route. This ridge is finely timbered, as are also the level spurs which put out on either side. The streams between these spurs cut down into deep gorges and ravines close to the main ridge, and afford some magnificent scenery. On section 112, seven miles north of the State line, is the last wooden trestle on the road. This indicates the character of the work. A hundred and forty miles of road and not a wooden trestle. Traversing nearly the whole width of the State of Tennessee, through those intricate mountains and rough valleys, and not a wooden trestle. All the creeks, rivers, chasms, and ravines are arched with the most substantial masonry or prepared for viaducts and bridges of iron. And these iron structures, properly attended to, will last at least a hundred years—make a note of that.

The wooden trestle on this section, 112, is very strong, of the best oak, and well put together. It is 300 feet long, and fifty-seven feet high, and crosses Apple Tree branch. Just before this is a deep cut, through blue shale, which is falling in considerably, owing to the material on the sides having been "powder shaken" in blasting, and the disintegrating effects of the atmosphere. All of these cuts for twenty miles or more, on each side of the State line, through this wretched blue shale, slate and soft sandstone, will give trouble hereafter. There seems to be no way to do but to cut them down to a slope of about forty-five degrees. If this is not done, they will take themselves down in time. Then the stuff can be dumped out upon the fills, and made to serve a good purpose. This is very much easier done after the track is laid than before. It is the programme, I believe, to make an embankment of apple tree trestle in this way. Running southward, we pass through many pretty heavy cuts in soft sandstone and they are not in good condition. The sandstone is crumbling slowly, forcing constant digging at the ditches to keep the road-bed level, and free from all obstructions.

Section 119 is the last in Kentucky. Here Fox branch is crossed on an iron viaduct

sixty-eight feet high. This takes us to the southern border of Kentucky. Nothing marks the State line but a plain stone about twenty inches high. But for that a person might pass from the sovereign State of Kentucky and leave its sacred soil without knowing it.

TENNESSEE.

The first landmark in Tennessee that the traveler notices, is a saloon. There were hundreds of these miserable little log grogeries stretched along the line of the railroad, where, untaxed whisky was sold to the laborers in its raw condition, and free fights and the devil's work promoted. Near here is the Pine Knot Tavern, in Kentucky, an old "landmark."

THE CUMBERLAND TABLE LAND is recognized as one of the three great natural divisions of the State of Tennessee. As a natural division, it is well defined, and as to many things, has no lack of interest. As we will see hereafter, it is the great depository of all the stone coal in Tennessee. Fruit growers and horticulturists, notwithstanding its general agricultural character is not in the best repute, look to it as a field of promise. Stockraisers hope to make it a land of meadows and pastures; its cool summer nights render it attractive during the hot months; and it bids fair, in a few years, to be the favorite summer resort of southern men.

As yet this portion of the State is, for the most part, but thinly settled. Over its wooded plains the wild deer is still chased, and in some of its wild coves, the wolf and the black bear find hiding places. Nevertheless, it has upon its flat and elevated surface, a number of small villages, and upon its northern half, especially, many tracts well covered with farms.

The belt just mentioned crosses Tennessee obliquely. The portion within the State—the table land we are considering, although much indented by valleys and coves, is nowhere completely cut in two by them. It could furnish a highway from Kentucky to Alabama, upon its flat top, along which a traveler might pass without once descending, and even without discovering, at any time, his elevation. The engineers of the Nashville and Chattanooga Railroad, in their experimental surveys, could find within Tennessee, no low pass through one of the leading arms of the table land, and were, therefore, compelled either to ascend and go over, or else, by making a great deflection to the south, in Alabama, go round it. They adopted the latter alternative. The top of the table land, though comparatively flat, does not become monotonous to the traveler. Low ridges and shallow valleys, with crystal streams, are occasionally met with, and afford a pleasant variety, which relieves what would otherwise be the sameness of its "flat woods."

At almost all points, on both sides, the surface breaks off suddenly in sandstone cliffs and precipices, which are from twenty to 100 or even 200 feet high. These form all along the sides of the table land, a well defined margin or brow. From beneath this very frequently overhanging brow, the steep slopes of the sides commence, and run down to the low lands. With the exception of the north-eastern part of the division, the slopes below the cliffs rest mostly on limestone. The sandstone which appears in the cliffs, caps the whole plateau, while limestone forms its base. The former gives sharpness of outline to its crested margin. The eastern border of the table land is comparatively a nearly direct or gracefully curving line. The indentations made by the streams, are, upon the map, hardly noticeable. Along its western border, however, it is remarkably different. Here the table land is irregularly scalloped and notched by deep coves and valleys, separated from each other by long spurs jutting to the west. These deep indentations, from which, and in some cases, through which, flow the different branches of the Elk—Collins river, Caney Fork, Roaring river, and Obey's river, give the western outline a very ragged and dissected appearance. In many coves and valleys referred to above, at the base, and on the limestone or lower slope of the table land, are springs remarkable for their size and for the amount of water they discharge. In quite a number of instances, these springs bring to the day, at once, large creeks, tributaries to the rivers above mentioned. Some of them furnish excellent mill sites. Along the base of the eastern escarpment, also, similar springs occur at intervals. These streams are the outlets of subterranean streams, many of which, doubtless, flow through long, and unexplored caves and passages in the great limestone bed, upon which the sandstone and shale-cap of the table land rests. Not a little of the water which falls upon the surface is thus drained off.

Immediately north of the Tennessee river, the name of Walden's ridge is applied to the entire arm of the table land cut off by the Sequatchee Valley. Before this arm connects with the main body of the platteau, around the head of the valley mentioned, it takes the form, the edges rising up in crested ridges. Above Sequatchee Valley, and in a line with it, the western edge becomes blended with, or rather constitutes the eastern side of a range of mountains, (Crab Orchard) which rise above the general level of the table land and may be regarded as resting upon it. At the same time the eastern edge becomes more prominent, and soon alone takes the name of Walden's Ridge. It is more or less

THE EASTERN GROUP.

THE NORTHERN GROUP.

THE WESTERN GROUP.

THE SOUTHERN GROUP.

sharply crested, and appears like a ridge placed along on the margin of the table land. Further north, above Emory river, this sharp ridge becomes entirely detached from the body of the table land, being separated from it by a deep and narrow valley or line of valleys. From the Salt works, in Anderson county, north-eastward, this ridge is very prominent and characteristic; it runs many miles in a direct course, then curves beautifully around to the north-west, after which it again pursues a direct course until intersected by the valley of Cove creek, near Col. R. D. Wheeler's in Campbell, where it falls away. Here, however, it is very nearly continuous with the ridge of similar character of which I have spoken, at the point where the latter curves. The portion of this first mentioned ridge, from Cove creek to Cumberland Gap, may be considered as continuing the line of Walden's ridge on to Virginia. Walden's ridge above the Emory, must not be confounded with the "little" sharp ridge, which is often found along its south-eastern base, and to which reference has already been made. The latter ridge pertains to the valley of East Tennessee. Walden's ridge, together with the narrow valleys which lie along its north-western base, belong to the table land, having the same rocks, etc. These ridges, from the Emory to Virginia, are among the greatest curiosities of the whole table land. Sharp, bold and roof-like, mosty made up of vertical sheets of solid sandstone, they appear like a vast military work, designed to protect the main mountain from the encroachments of the lowlanders. There are very few gaps in them. Those that do occur are water gaps formed by creeks. To get at the foot of the mountain, though it may not be more than half a mile off, it is often necessary to ride half a dozen, to find a passage through these skirting ridges. The north-eastern portion of the division under consideration, presents other local features which remain to be mentioned. These consist of groups of high ridges or mountains, which, rising above the general level of the table land, appear when seen from the west, to rest upon it.

First, we have the New river group. The head-waters of New river flow from a group of mountain ridges, among which its tributaries are deeply sunk. The range that divides these waters from those flowing into the Clinch, is one of the most important of these ridges, and is a conspicuous object to an observer in the great valley to the east. It forms, for many miles in Anderson and Campbell counties, the eastern escarpment of the main table land, or rather, it is the most eastern ridge of the group; the plateau character of the division in this region being to a great extent lost. It is called, for a good part of its length, Cross mountain. Along its south-eastern or north-eastern base, runs the remarkable skirting, Walden's ridge. Other elevated ridges occur in this group. They are all within that portion of the table land lying south-east of Huntsville, and between Jacksboro and Montgomery.

Between Emory river and the head of Sequatchee valley, and in a line with this valley, is a nearly straight range of mountains of some interest. It may be called the Crab Orchard range or group. Originally the mountains of this range formed, doubtless, a continuous ridge. It is now cut into three unequal parts, by two gaps—Crab Orchard and Grassy Cove gaps. The south-western mountain of this range is known as Walden's ridge, a name, as we have seen, applied to several parts of the eastern side of the table land. The north-eastern part of the range is Crab Orchard mountain. The highest parts of these mountains are but little, if any, less than 1000 feet above the general surface of the table land. The mountain between the two gaps is short and not as prominent as the others. There are but few out-lying mountains belonging to table land. The only one of importance, on the eastern side, is the grand Lookout mountain, which starts up boldly just within the limits of Tennessee, and runs into Georgia. This is a long narrow mountain; closely related, geologically to the table land. But to return—on entering Tennessee, on the Cincinnati Southern Railway, we first come into Scott county; this is bounded on the north by Kentucky, on the east by Campbell county, on the south by Anderson and Morgan counties, and on the west by Fentress. The act establishing this county was passed December 17, 1849. It was composed of fractions of Anderson, Campbell, Fentress and Morgan counties. By reference to the map of Tennessee, it will be seen that it is one of the most northern counties of East Tennessee. It lies on the Cumberland table land, just described, and possesses all the characteristics of that region. The only lands that are valuable, lie upon the creeks, and these are narrowed down to small strips. There is a sparse population in Scott county. It has had no benefit, whatever, from immigration. Perhaps not a dozen families have gone there in as many years. This is owing to causes already indicated. It is out of the way, the farming lands are not good, and the trouble, expense and annoyance of reaching market, have operated as a barrier to immigration. There is no difficulty about buying land. Thousands of acres are for sale, and upon satisfactory terms. Improved farms can be had for about five dollars per acre, and unimproved for from fifty cents to three dollars per acre. The citizens are extremely anxious to augment their population, and would do all in their power to make new comers welcome in their midst. In some respects immigrants could do very well here. Sheep hus-

bandry and fruit raising would pay largely. The extensive plateaus of land spreading over the surface of the mountains, and the rich growth of mountain grass found there, make it suited for the rearing of sheep. The county is not much annoyed by mean dogs, and, therefore, sheep would not be disturbed from this source, The cost of raising them would be only nominal. The winters, as everywhere in East Tennessee, are mild and short, and the summers are pleasant in this mountain region. Fruit could be raised to any extent. Apples, peaches, pears, cherries, and all the smaller fruits grow to perfection. Between Emory Gap and the Kentucky State line, the soil is derived from sandstone and is thin and unproductive of the usual field crops. Not one acre in twenty has been brought into cultivation.

The Cumberland table land loses much of its plateau character in this portion of the State. The surface is usually rugged, with high sharp crested ridges and rounded peaks, that sometimes rise 1,500 feet above the road bed. Though rugged, this country is well timbered, and on the northern slopes of the ridges the soil is very fertile, and the timber of excellent quality. Deep canyon-like gorges are cut by the numerous streams deep in the bosom of the mountain. Some of these streams are walled in by perpendicular cliffs of sandstone from 300 to 400 feet high. A few narrow valleys occur between the foot of the superimposed ridges, but these mountain valleys are not so productive as the northern and western slopes of the ridges. From these high mountain sides many fine chalybeate springs, and other kinds, break out. Wild grasses spring up in great abundance and supply a rich forage for cattle and sheep. The air is pure and the region healthy. For the growth of apples, no region is superior to the country which lies between Emory Gap and the Kentucky State line. They never fail, and they have a plumpness and richness of flavor rarely equalled. To sum up, in brief, the advantages which the country on this portion of the line affords, we may say:

1. It is healthy—Consumption is almost unknown here, and malarious diseases seldom occur. In many places there are no doctors within twenty miles. The inhabitants are hardy and long lived, though living a life of privation and exposure.

2. It has an abundance of coal. Throughout the extent of the railroad from Emory Gap to the Kentucky State line every cut reveals more or less coal. The seams are sometimes thin and worthless, but often are from three to four feet thick. In the ridges above the road better and thicker seams are met with.

3. It has a great variety of valuable timber. For many miles the line of road traverses forest of the finest white oak. On the mountain slopes are poplar and walnut in great quantity. From Scott and Morgan counties timber enough to supply all the agricultural implement manufactories, within reach of the road, for a century to come, can be obtained.

4. The forests of chestnut and oak, which are usually found upon the tops of the ridges, are very extensive, and are capable of supplying millions of cords of the very best tan bark.

5. As a grazing region, it is very valuable. The wild grasses are everywhere abundant, and great herds of cattle are fattened upon these wild grasses, for the northern markets. Goats, that thrive upon shrubbery, can be reared at nominal cost. They live throughout the winter, without any other food than the buds of the native shrubs. Sheep also are very hardy and do well.

6. An excellent situation for extensive apple orchards. The apple is the surest crop grown, and the facilities which the road will afford, together with the small outlay necessary to start an orchard, will make this a famous region for the production of apples, and will enable it to compete successfully with any portion of the United States.

7. As a place for summer resort, also, it must become famous. The salubrity of the air, the excellence of the chalybeate springs, the high elevation, and the grandeur and beauty of the natural scenery, will make it a favorite locality for those accustomed to such rural retreats in summer.

8. For growing all garden vegetables, the soil of this sandstone formation is well adapted. Early vegetables can be supplied to the Cincinnati and other markets at a cheaper rate than from any other point. Irish potatoes, cabbage, onions, and indeed all root crops, grow to great perfection. Irish potatoes, especially, are noted for their excellence. Market gardening will, doubtless, become one of the leading industries of this mountain region.

There has been but little progress in the system of farming. The old plans are still adhered to for the most part. Improved means of husbandry have not been introduced to any extent, and most of the farms are cultivated with the ancient implements in vogue half a century ago. Bull-tongue ploughs do all the turning of the soil, the bar-shear being regarded as an innovator. There is scarcely any sowing of clover, and but few meadows. Corn is the chief crop, and that is fed to an inferior breed of hogs. Very little wheat is sown. Every species of stock belongs to the scrub race. The farmers have had little en-

couragement, in consequence of their isolation, to improve either their lands or their stock. They needed railroads and they needed markets.

The prevailing rocks of the county are red sandstone and freestone. Limestone is seen scarcely anywhere in the county. The water is pure freestone and is very fine. There is an excellent mineral spring near Huntsville, consisting of sulphur water. The healthfulness of this region cannot be questioned. Sickness is rare. This is owing, of course, to the pure mountain air and the excellent water. The prevailing timber is black oak, post oak, poplar, walnut, pine, etc. Of this there are vast quantities, but has been of no great value, owing to the lack of the means of transportation.

The principal streams are Straight, Buffalo, Paint Rock, Brimstone, Wolf, Clear Fork, Smoky, Difficulty, Roaring Paunch, and Tellico creeks, and New river. Along the most of these streams there are narrow strips of fair land, capable of producing from twenty to thirty bushels of corn to the acre, and about eight or ten of wheat. None of these water courses are reliable for water power. The most of them go dry during the summer season. Consequently there are few mills in the county, and no manufactories of any kind. Its mineral resources are said to be very great, consisting, for the most part, of iron and coal, which will be developed when the railroad is more fully understood in reference to those hidden treasures. The county needs badly a better and more efficient school system. There are but few schools that are doing much good. There is one at Huntsville, but not what it ought to be. The soil of this county is very similar to that of Morgan, our next county, where a full description will be given.

CHITWOOD

is the first town (so-called) on our route upon entering Tennessee. It is a small, insignificant place, but has acquired some reputation as an old "landmark." It may yet grow considerably, in consequence of its being immediately on the line of this road. Indeed this road will be of incalculable benefit to this entire region, cut off, as it was, from the commercial world.

The next place we come to, or rather near to, (for it is three miles east) is Huntsville, the county-seat. It is situated near New river and has a population of eighty. Its business is very small. Two dry goods stores, two groceries, one blacksmith shop, and two taverns constitute nearly all the business houses. There is one church and, sometimes, a school.

We are now on the heaviest division on the road; these divisions are generally of forty miles length, so we mean from the State line forty miles south embraces some of the heaviest work on the road. The first streams we cross are Bear creek, Big branch, Roaring Paunch, Crooked branch and Roaring Paunch branch—lovely names, these, but they are really beautiful streams, picking their way through large rocks and dense growths of hemlock and laurel. Over these streams are iron viaducts thirty to seventy feet high. These are all crossed in the first six miles, which brings us to Flat Gap, on section 124. This is a heavy section, every foot of it a cut or a fill. Running along for nine miles of comparatively light work, until we reach section 135, which is a very wild one—you will never tire of admiring its beauties. The road approaches Phillips' creek, through deep rock cuts, and the roof of a "rock house" has been blasted away to make the road bed. Phillips' creek is a wild mountain stream, falling seventy-five feet in 600. It is crossed by an iron viaduct about eighty feet high. Section 137, two miles south of here, enjoys the distinction of having the deepest cut on the road, and the deepest one I ever saw on any road. It is 103 feet deep! First it was intended for a tunnel, but as it would require timbering, owing to the nature of the material, and as a very deep fill exists immediately next it, the Engineers made a cut of it. The material is of rather soft sandstone and is crumbling some. In a few years, without attention, it would fall in to the depth of thirty or forty feet. The material disintegrates when exposed to the air, and the cut will long be troublesome to trains. New river is on the next section, 138, and is one of the wildest of the wild streams crossed by the line. Approaching the river, the country is very rough. Within half a mile on the south side there are two heavy cuts and two heavy fills, and on the next section north is the deepest cut on the road, 103 feet deep. New river is one of the chief tributaries of the Cumberland. The railroad crosses it about eighteen miles south of the Tennessee line. There are 4,788 cubic yards of masonry. The contractors had great difficulty in getting suitable stone. This whole division lies above the limestone formation, and the suitable sandstone is not always in reach. In this instance the contractor, after opening a quarry and building an incline plane tramway to it, had to abandon it and open another three miles distant, hauling every stone that distance. These contractors, Fitzgerald, Mallory & Flynn, are very strong having finished many miles of work on the road. There is more masonry required at the New river crossing than at the Ohio river bridge. The approaches to the bridge proper will be over iron viaducts, and

the length of the whole iron structure will be about 1,200 feet, and height above low water 140 feet. Standing on the north side of this chasm and river, one has an impression of the magnitude of the obstacles which have been overcome in the prosecution of this work. The next section, 139, has one considerable cut and one considerable fill, the cut having emptied into the fill, so to speak. On the next section, 140, we strike the second largest tunnel on the road. Mr. Robbins had the contract for this tunnel, the first contractors finding it more than they could successfully manage. Mr. Robbins is a citizen of Newport, Ky., but was a heavy contractor on the road, and a successful one. He had a house on the hill, right over the tunnel, where he lived with his family, and knew what was going on. The view from his house is grand. The horizon is not obstructed in any direction. It is a mountain on top of mountains. North, east, south and west, they roll away in gentle undulations, like the waves of the sea. The view at sunset is captivating. The horizon is often all aglow with purple and gold, and you seem to see away, away into infinite space. And the air is purity itself. Every breath is buoying, and you feel a new life in your veins. But the tunnel! It is second to King's mountain in size, being 2,526 feet long. The material is miserable for tunnel purposes. It is soft blue slate, in thin layers and in compact masses, and between these are veins of clay and coal. The slate is hard, at first, like solid rock, but when exposed to air, it disintegrates into slush and mud. To know how all this stuff became mixed in together in such shape, you will have to put nature on the witness stand. The vein of coal is about two feet thick, soft and not of first quality. The whole tunnel is timbered. For this purpose Mr. Robbins set up a saw mill and bought 600 acres of land covered with white oak. Several men have been killed in this tunnel also, by falling slate. It would not be an overestimate to say that thirty men have been killed by tunnel work on this road. A mile or two more of comparatively light work, brings us into Morgan county. The middle section of this road traverses a region rich beyond the comprehension of the unskilled observer, in latent resources of mineral and agricultural products. Millions of acres on either side of the road, from the Kentucky river to Emory Gap, can be bought at merely nominal figures, but they are as good sheep lands, as good for the purposes of the grape culturist or general fruiterer, as any acres the sun ever shone upon; while beneath them lie exhaustless beds of iron and coal in such close proximity as found no where else in the world outside the southern mineral region. When these dreary knobs are covered with vineyards and orchards, and studded with sheep cotes; when scores of furnaces light up the gloomy ravines and impart their glow to the forbidding palisades, then will the great and enterprising Queen City find that that which deterred all others from undertaking to build her a highway to the south brings her most profit; that these mountain fastnesses were better worth the reaching than the sunny plains beyond, covered with cotton and cane.

The following extract from Mr. Safford's geological work, on Tennessee—a valuable work—will be read with interest. It was originally from the pen of an accomplished gentleman and farmer, who has resided on the table land for many years.

"So much has been written about the table land of Tennessee, by interested parties, that any one stating the plain truth will be said by them to be an enemy to the progress of the State. Such persons have, in my opinion, been a real draw back upon the prosperity and settlement of the table land. It is true of a country, as Washington Irving has said of a man: 'The public will forgive a man anything sooner than being overpraised.' So, of a country, if it be praised for that to which it is not entitled, emigrants, on being disappointed, will not give credit for its real merits.

But many things belonging to the table land of this State can scarcely be overpraised. The water, the climate and the health have not been fully valued in the estimate of this part of our State. On the great plateau of Tennessee, the soft, limpid purity of the water is admired by all observing travelers. The climate, equally exempt from the frigid rigor of the north and the debilitating heat of the south, is nowhere excelled for the comfort of its population. Here may be enjoyed the clearness and the brightness of an Italian atmosphere, without the baleful influence of the Maremma marsh, or the debilitating effects of the African sirocco. Here Hygua's reign is undisputed. Neither cholera, consumption, nor fever ever pretended to dispute her salutary sway. Emigrants from the frozen shores of the St. Lawrence, or from the fenny bogs of the Carolinas, here meet the invigorating breeze, and if health is to be found upon earth, they may hope for it here.

The extent of the Cumberland table land within this State, makes it important that its value in an agricultural point of view should be understood. Reaching across the State, from north to south, it is, on the road from Kingston to Sparta, at least forty miles wide from east to west. Most of this large surface is beautifully level, and generally well covered with timber, consisting of various kinds of oak, chestnut and hickory, with other kind along streams. The soil is a sandy loam, easy of culture, and though not so fertile as other portions of the State, may be made by the application of lime, which is within reach, and proper tillage, very productive at moderate expense. The table land is the genial

Boy with Dolphin.

Boy with Swan.

Boy with Snake.

Boy with Tortoise.

and appropriate home for all the delicious fruits of a temperate climate. The apple, when raised here, will keep longer than when raised upon a lower level, in the same latitude. The same facts are observed here which have been demonstrated elsewhere, that all Alpine productions are superior for their kind. Though the soil will not produce so many bushels of wheat per acre, yet the bushel is heavier than that raised upon richer land. So of other cerealia and the grasses. At no distant day these highlands will be much prized; not only for the production of all kinds of fruits, but for the raising of stock. For seven or eight months in the year cattle here require no expense from the owner except salting. Sheep are as healthy as the deer which roam over the forests; no rot or foot-rot ever attacks them; old age appears to be the only malady that attacks them, and that the flock master need fear. The natural production of the soil furnish a copious pasturage for two-thirds of the year, and improved meadows of blue grass, red top, or other perennial grasses would supply the balance. Here swine live from year to year, and increase without care, upon the natural range. Here the sportsman may find the wild boar as fierce and with tusks as long as any that ever honored the chase in the Hercynian forest."

Mr. J. W. Dodge, who formerly resided in Cumberland county on the table land, and who made himself and the mountain famous by raising and bringing to market superb apples, related the following circumstance to me:

"While I was at the Hermitage, painting Gen. Jackson's picture, the old General one day said to me, in his emphatic way: "Mr. Dodge, I have traveled over the table of the Cumberland mountain frequently, and it is my opinion that it is destined to become the garden spot of the Union." It is as pasture or range ground, that these mountain areas are at present interesting. A rich spot here and there, may be found in cultivation; at these places heavy crops of wheat and other cereals are sometimes raised. I recollect of seeing at one point, near "Cold Spring," buckwheat high enough to completely hide a man riding through it on horseback. The soil and position of these rich spots appear to be well adapted to the raising of Irish potatoes.

Morgan county, the next in our route, is, in many respects, similar to Scott, and yet, in other ways, it is totally unlike; but we will allow the reader to be the judge of that. Morgan county is bounded on the north by Scott and Fentress, on the east by Anderson, on the South by Roane and Cumberland, and on the west by Cumberland and Fentress counties. It is one of the mountain counties, and embraces a great deal of rough and untillable land, especially in the southern portion. There are a number of fertile valleys, but they are not wide. The most noted are Crooked Fork, Flat Fork and Emory. The soil of these is productive, and is of a dark mulatto color. The land on the Obed and Emory rivers are exceedingly fertile. Although a large county, there is a great deal of land totally unfit for cultivation. These consist of abrupt hills, ridges and mountains. Much of the land is on the market and can be bought low. Improved lands are worth about twenty dollars per acre; medium, about ten; ordinary, about five, and unimproved, about from fifty cents to one dollar. The usual terms of sale are one-third of the purchase money paid in hand, and the remainder in one, two and three years, with six per cent. interest. The terms of leasing are one-third of the crop. The leading crops are corn, wheat, oats, hay and potatoes. Very little barley, buckwheat, peanuts or hops are produced, and but few pears, cherries, plums, strawberries, and raspberries are grown. The climate and soil are admirably adapted to the growth of apples and peaches. Not much attention is paid to either. Grapes have been thoroughly tested by an enterprising colony of Germans, settled at the town of Wartburg, and they have been found to do well. This colony make a considerable quantity of wine every year, which is sold at remunerative prices. It usually commands about four dollars per gallon, retail. It is believed that there are few regions better suited for extensive vineyards. Some of the grasses grow well, and produce good crops in this county. At the same time, the farmers have not improved this advantage. The usual grasses raised is timothy and herds-grass. Blue grass grows well in places. Orchard grass, perhaps would suit this region better than any other kind. A good deal of sorghum and maple sugar is manufactured. The finest honey in the world is produced here, and considerable attention is paid to the rearing and management of bees. There are no improved breeds of horses, cattle, hogs, or sheep raised. The varieties in use are of the scrub species. But a small percentage of either class is on the market. Mules are not raised to any extent. For rough work oxen are mostly used. The rearing of cattle and sheep could be made a most profitable business, from the fact that the hills, ridges, and mountains afford the very best pasturage. One difficulty in the way of raising sheep is the prevalence of sheep-killing dogs. No danger is apprehended from wolves, as they do not infest this region. This is not a hog producing country, for the reason that it is not adapted to corn. Considerable quantities of corn, it is true, are raised in the valleys indicated, and on the Obed and Emory rivers, but these constitute only a small proportion of the county. The great staples are "the

small grains," grass and fruit. Very much could be done in the dairy business—the making of cheese and butter—and yet everything is blank on this subject. Thousands of pounds of both could be made every year, at a small cost, and sold at a fair margin. Some attention is paid to the smaller industries, but not half enough. The demand for labor is amply met, though not strictly reliable. But few blacks are in the county. The work on farms and in households is mainly done by the families themselves. All are trained to industrious habits. The young men work on the farms and the young women do the work of the house. Allusion was made above to the fact of the existence of a German colony at Wartburg. They are an industrious, intelligent and enterprising people, and have done much to advance the agricultural, horticultural and educational interests of the county, but more will be said of them hereafter. The farm buildings throughout the county are plain. But few are of brick, a number of frame, but the greatest portion of hewn logs. Rails are altogether used for making fences, the average height of which is five feet. The cost of lumber is one dollar per hundred feet, and rails ten dollars per thousand. The mineral capacity of this county is equal to that of almost any county in East Tennessee. Stone-coal is found in every direction in great quantities. The long distance from market, and the difficulty of transportation have retarded development. The chief markets have been Knoxville and Rockwood, in Roane county. The water power here is unsurpassed. On all the streams mentioned, any desired power can be had. But little of it is made available. There are some grist or saw mills, but no cotton or woolen factories.

Soils.—The prevailing rocks of any region give character to the soil. The entire surface of the table land, with a few exceptions, lies upon sandstone and conglomerate. Most of the county has, therefore, a light sandy soil, with but little humus, and is greatly deficient in calcarious matter and other elements of fertility. In some places the subsoil is a yellowish red clay, strong enough to bear improvement, and responds readily to generous treatment, but the element of fertility must be supplied before it can produce satisfactory crops. On such sites good farms can be made by penning cattle on each field until it becomes thoroughly fertilized. But we cannot undertake to defend the capabilities of these lands for the production of grain. The expense of adding a sufficient quantity of lime to the soil would more than pay for good lands where nature has supplied it. For the production of fruits, grasses, root crops and most garden vegetables, they are scarcely surpassed. There are other places where the sub-soil is yellow, sometimes inclining to blue or white. It is frequently so porous that a walking cane may, with little effort, be thrust in to the head. Of course no amount of manure would satisfy its craving hunger. But even these lands are not without their value. They might be converted into extensive sheep-walks, and made to yield a return scarcely less than that from those more favored by fortune or nature. Besides, these two classes of mountain lands, we may consider the wet lands along the small streams and in the glades, as another class possessing peculiar characteristics. Their color when wet, is a dark blue, sometimes nearly black, but when dried they assume an ashen hue. Blue clay generally accompanies them as a sub-stratum. They are now regarded as of little value, and the few experiments that have been tried upon them have generally been with unsatisfactory results. The absence of timber, except a few valueless kinds, which delight in water, has added to the disrepute in which they are held. We do not like to venture an opinion which contravenes the experience of nearly all who have tried experiments upon them, but may it not be that those experiments have failed because their peculiarities have not been well understood? So far as we have been able to learn, the efforts to improve them have been limited to draining off the water. This, of course, must be done, but this is not all. Their sourness must be corrected. The partially decayed vegetable matter, which they contain in large quantities, is too acid to nourish the growth of any plants except hardy and gross feeders. This acid must be neutralized by the liberal use of some alkali, and for this purpose there is nothing better than common wood ashes. But while the population is so sparse, and lands are so cheap, we cannot expect much effort at improvement. The want of humus in the soils of the table land is owing, in part, to the annual fires in the woods, which consume all the leaves and dried grass and other combustible material, and leave the ground bare. These fires are kindled, as they say, to facilitate the early growth of the grass. It is true that it leaves the surface very smooth and clean, and we will not deny that pasturage is thereby obtained a few days sooner, but we cannot commend the practice, for it destroys the only natural source of fertility, and causes the land to grow poorer every year. Another evil growing out of this barbarous custom, is the injury thereby done to the timber, and particularly to the valuable chestnut trees, most of which are ruined before the time when they should be most vigorous and fruitful. As an evidence of the injurious effects on the soil, we may observe that the north hillsides, where the forest debris, being less exposed to the sun, is often too wet to burn, are always more fertile than lands otherwise situated. Along some of the larger creeks there are narrow bottoms, depressed more or less below

the general surface of the county. The lands in such situations, though light, are tolerably productive, and where they are not encumbered with masses of round water-worn rocks, are easy of cultivation. The anticlinal dip of the strata in the Crab Orchard range shows that it has been upheaved by a folding of the earths crust. By this means the mountain limestones, which lie underneath the cap rock of sandstones and conglomerates, have been brought up into and even above the plane of the table land, and where the superimposed formations have been removed by denudation, as at Crab Orchard Gap and Grassy Cove, they appear on the surface and give character to the soil. Consequently we have, at these places, lands similar to those in the limestone region along the western base of the table land.

FARMS AND CROPS.—The table land, as an agricultural region, is not in the best repute, and we cannot deny that it will suffer by comparison with any other natural division of the State; but, at the same time, we believe that its advantages have been too much undervalued. The price of land is very low, and a very large proportion of the area of the county is yet unimproved. The farms, generally, consist of a few small cleared fields on a tract of several hundred acres. Not unfrequently from one to twenty thousand acres in a body are owned by a single proprietor. Of course it is not often profitable to the owners, and it has become a common saying that "the more mountain land a man owns, the poorer he is." Much of it has been sold and resold, time and again, for taxes, and many law suits result from conflicting titles. About the only profitable use that is made of these large tracts of waste land is as a summer range for cattle and sheep from the farms in the valleys. Ranches or "cow pens," may be met with at many places, which, during the season of pasturage, are occupied by the herdsmen, who vary the monotony of tending the cattle with hunting deer, bear and wild turkeys. But there are some good, well improved farms on the table land, which yield to their thrifty and industrious owners a comfortable living, and we are glad to note the fact that the number of these is every year increasing. The leading crops, at present cultivated, are Irish potatoes, corn, rye, oats, buckwheat, tobacco, sorghum, sweet potatoes, turnips, and beans. Most garden vegetables grow in perfection, but as there has been no market, their production was limited. It is a notable truth, that almost everything that will grow on the mountain, is of better quality than the same article produced elsewhere. This is especially true of Irish potatoes, the mealiness and fine flavor of which cannot be surpassed. By the use of fertilizers and good cultivation, grain can be successfully grown. Experiments in this line have been tried to a considerable extent within the past ten years, resulting, in one instance, in the production of thirty bushels of wheat to the acre. Mediterranean and Walker wheats are the varieties generally cultivated. A very satisfactory proof of the nutritive qualities of the wild grasses is found in the fact that cattle, sheep, and horses fatten on them rapidly and easily. The various cultivated grasses do well with fair treatment. This is particularly true of red top and orchard grass. The soil and climate are also favorable to red clover and timothy, and with good farming, they are generally successful. Grasses are usually mown, sometimes pastured, but rarely, if ever, given to the soil as manure. The amount of land appropriated to the cultivated grasses is much smaller than it should be. In the ante-bellum period, Mr. J. W. Dodge, as we have before said, "made himself and the mountain famous," by raising superb apples, which carried off the prizes at fairs in all parts of the State. His worthy example has been followed by many others, and orchards, producing fruit of quality far superior to the same varieties grown in higher latitudes, are now quite common. It is now an admitted fact, that fruits grown in a sandy soil are richer in sacharine matter than those of the same name grown in a limestone or clay soil. Grapes have been tested sufficiently to show that they can be successfully grown. All varieties of fruit, which are adapted to a temperate climate, can be profitably cultivated on the table land, and, as a correspondent truthfully remarks, "it is easy to have a thrifty orchard where you cannot have a good cornfield."

WARTBURG, the county-seat, lies three miles to the east of our route, consequently we can better "hear tell of" than see it. It is a place deserving of some mention, on account of its location, and the experiments which have been made in the vicinity in the growing of fruits. The town is situated 1,500 feet above the sea, on a considerable plateau, which extends southward for ten or twelve miles, to the breaks, near Emory Gap. This plateau is traversed by occasional ravines and deep gorges, hemmed in by precipitous sandstone bluffs. On the north-east Ward's mountain looms up in majestic proportions about 1,200 feet above the town, and 2,700 feet above the sea. It is a long, rounded top ridge, whose general course is north-east and south-west. Its slopes are densely clothed with forests of excellent timber, consisting of chestnut, chestnut-oak, pine and black gum. On the north-western slope many walnut trees are found. On a tract of 5,000 acres, lying on its top and sides, 340 large walnut trees have been counted. The following were counted by Drury Smith, at another point; forty-seven walnut trees, four feet and over; seventy-eight, three feet and over; 132, two feet and over; and 148 of one foot and over. Two chestnut

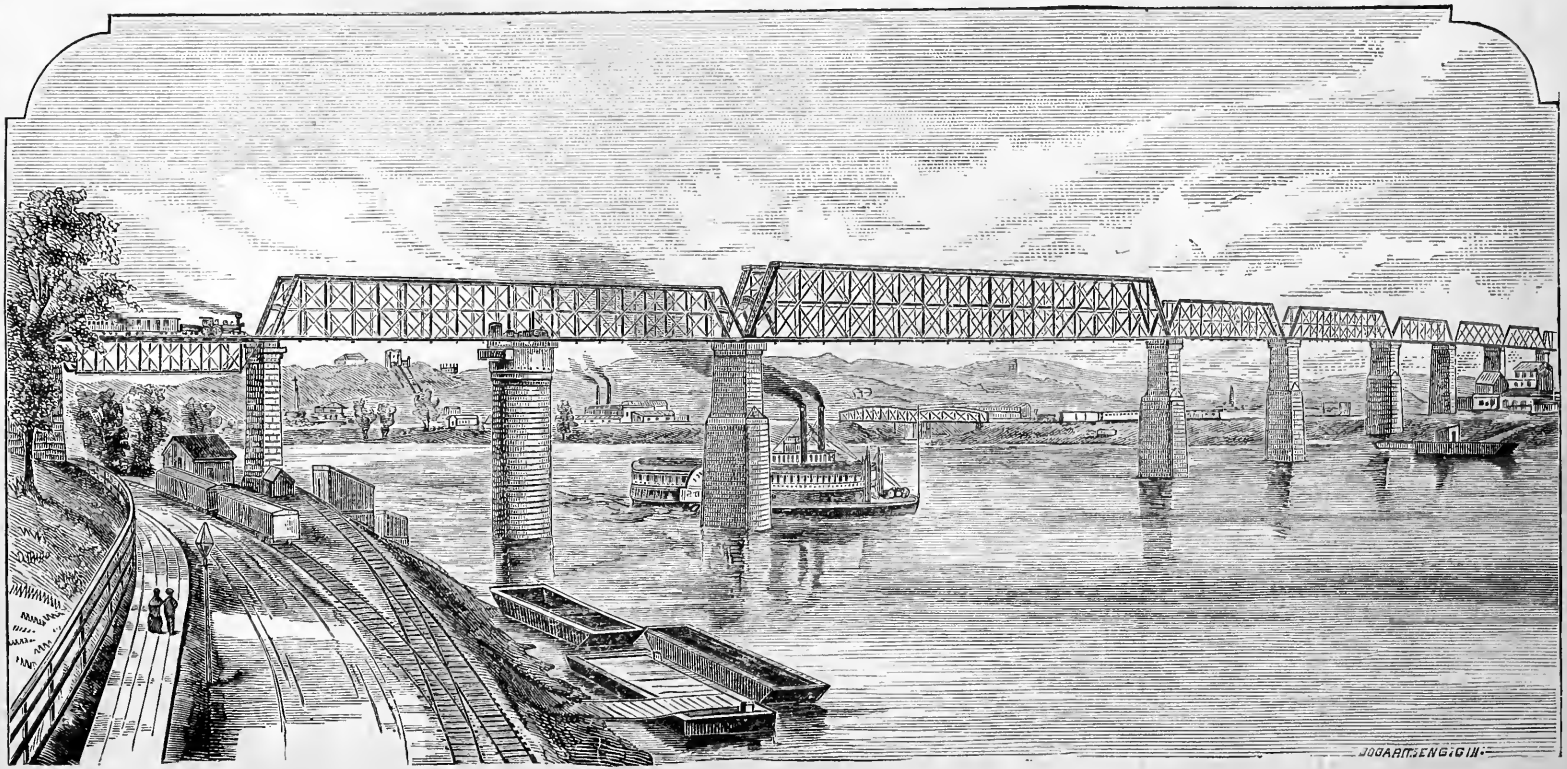
trees were measured, five and six feet respectively. North-east of Wartburg, on the head-waters of Emory river, and east of the line of railroad, on the line between Morgan and Scott counties, there are large bodies of walnut timber in the coves and on the northern slopes. The soil is very fertile, but so much broken as to preclude cultivation. It would make excellent grazing lands, for which purpose it will no doubt be ultimately used. The coves running up into this mountain are very fertile. Even up on its crest farms have been opened, and the soil is said to yield generously, producing even more than the soil of the mountain valleys below. Chalybeate springs break out from its top.

The reader should constantly bear in mind that these peaks, or ridges, lie upon the top, the general top of the Cumberland plateau—mountains piled upon a mountain.

Lone mountain rises to the south-east of Wartburg, four miles distant. Pilot mountain, eight miles to the north-west, is said to be the highest point in the vicinity. East is Chimney Top, nearly as high as Pilot mountain. South-west, across Emory river, is Crab Orchard mountain. This range, extending south-west into Cumberland county, is cut into three unequal parts by two gaps. The highest peaks of this mountain are 1,000 feet above the general level of the table land. East of Wartburg there is a considerable area of mountain valley lands, on Mud creek, and Flat Fork, tributaries to Emory river, hemmed in by Ward's mountain on the west, and Brushy mountain on the east. These valleys are of moderate fertility, and may be considered highly productive for mountain lands. The soil is frequently water-soaked and white. A spur runs down into this valley from Ward's mountain on the north-west. Flat Fork runs at the western foot of Brushy mountain, which is the northern prolongation of Lone mountain. Brushy mountain is noted for the excellence of its timber. The walnut timber was so abundant on its western slope that it was used for making fence rails.

Wartburg was settled by Germans many years since. These people planted out large orchards and vineyards. The apple trees have done well and bear vigorously, and the finest specimens of apples may be found here of any place in the State. Several years ago, the apples from this place took the premium at the fair at Nashville. Wartburg has a population of about 200, mostly Germans. It has several churches—one a Lutheran; it can boast of one of the best schools in the country—about eighty pupils in attendance. The trade of Wartburg, before the completion of this road, was confined to a very few articles, that would bear transportation over the rough road of the country. Feathers, beeswax, ginseng, wool and fruits, constituted the principal exports. There are four dry goods stores, three churches, two schools, and two cabinet maker shops in the place. Some excellent coal is found in the vicinity of the place. Jones' bank, lying four miles east of the town, has a seam thirty-four inches thick. It yields a very fine block coal, the best I have met with anywhere. The seam is horizontal, and crops out in one of the mountain valleys. The coal from this place supplies the demand at Wartburg. Coal has been opened at several other places, and the seams are much more promising here than those near the railroad; and this is generally true in Morgan and Scott counties. Mr. J. B. Killebrew, State Commissioner, writes of the country from Triplett's Gap to New river:

"Triplett's Gap lies on the railroad, four miles north-west of Wartburg. The country between the places is level, with a sandy soil, and a good growth of timber, pine and black oak predominating. At Triplett's Gap a commissary department was kept up, and the vegetables exhibited, all grown on the county and table land, were as fine as can be seen at any market. The cabbage showed large compact heads, not excelled by any brought from the North. The onions and Irish potatoes, also, were unsurpassed by those grown in any country. The apples were plump, round, and large—many of them weighing fifteen ounces. The tunnel at Triplett's Gap is cut through black shale, filled with nodules of the carbonate of iron, so abundant as to form probably an eighth of the material removed. Just about Triplett's Gap a considerable pine forest sets in on both sides of the road, and continues northward for two or three miles. This gives place to a white oak forest which is almost unbroken to the State line. The forests of white oak are of peculiar value. The timber is of medium size, rives easily, but is very heavy and close grained. Glades occur frequently on each side of the road. These grow wild grasses luxurantly, and thousands of sheep can be kept on these mountain grasses at a nominal cost. This part of the table land, extending from Wartburg north, greatly resembles Wales in aspect and in the character of its soil. The scenery from the elevated peaks has great picturesque beauty and will, no doubt, in time, attract many visitors. It will also be the home of the herdsman; and butter, cheese, wool, beef, mutton and fruit will form no inconsiderable articles of export. In Wales the Hereford cattle are preferred, and this breed, or the Devon, would be found very profitable in this rough mountain region. The coal exposures on the line of the road, from Triplett's Gap to the State line, are usually thin and unimportant. A seam is exposed at tunnel No. 17, a foot or more thick. The surface above this tunnel continues for some miles, broken, with but few level areas. The timber, mainly white oak, increases in size and value. That on White Oak creek is very fine. This is a tributary of Board



CINCINNATI SOUTHERN RAILWAY BRIDGE, ACROSS THE OHIO RIVER.

Camp, which empties into New river of the Cumberland. The shales above White Oak creek are remarkable for their beautiful violet colors and micacious specks, much resembling the metamorphic slates of the Ocoee group. This violet shale disintegrates less rapidly than the black. Clay iron stones are abundant in every cut through the shales.

Black Wolf creek is in Scott county, and comes from the west side of the railroad. It empties into Clear creek, an affluent of New river. Upon Black Wolf the timber is very heavy. Large white oaks and poplars send their long columns more than 100 feet into the air, equaling in size the princely white oaks and poplars of Obion county in West Tennessee. The soil grows better, and is not so broken. The land is well suited for the production of tobacco, and efforts will be made by some farmers to plant largely of this crop. On Black Wolf creek some good seams of coal have been opened—one of these is over three feet thick. Three miles north of this creek the country becomes very rugged. Upon the plateau lands, to the north-west, beech trees are quite abundant—a very unusual occurrence upon the table land. So far as one may judge by the character of the crops, the soil may be considered of a better quality than the plateau lands on other parts of the mountain. Very little sand is seen. A yellow clay forms the sub-soil, and the native growth denotes considerable fertility. New river supplies some valuable water privileges. There are seven or eight mills situated upon it within Scott county. Its tributaries—Buffalo, Brimstone, Clear creek, Clear Fork, and Phillips creek—all furnish more or less available sites for mills.

But to return to the railroad, for we have been wandering a great deal through this strange country—who could help but tarry in a spot like this.

The construction through Morgan county is very heavy; passing over some heavy cutting and filling, we come to section 149, which has a 1,098 foot tunnel. The material of this is various. Nature seems to have exerted herself to vex the tunnel contractors. The bottom is blue slate, which disintegrates rapidly when exposed to the air, while the top acts the same way but more slowly. The whole tunnel is timbered. Section 152 has a tunnel of 1,250 feet, which is an ugly affair, having required timbering from end to end. The material of the tunnel is blue slate. This tunnel should be known as ' Death's Tunnel," as seven men have been killed in its excavation; two of them foremen, and another had his leg broken. But some of these were the result of carelessness, the men venturing under overhanging ledges of slate. In this kind of work men become as hardened to danger as in war, and take all sorts of risks. The material taken out of this tunnel has turned to soft mud, and the rain and water will take it into the streams, where other combinations will be formed, illustrating, in a rapid way, the ceaseless changes going on in nature's laboratory. When first exposed to air this material is nearly as hard as limestone. The engineers and contractors had no idea what sort of stuff they had gotten into, until they were already in. Sections 156-7-8-9 are four rough ones, some of them costing not less than $100,000, a heavy price, per mile. On this four miles are three tunnels, in length, respectively, 397, 360 and 646 feet. The first, as here given, is through blue slate, the second through gray sandstone, and the third through blue slate. The first is supported by framed white oak timber, as the slate crumbles, when exposed to air. Two of the tunnels, called twins, are on one mile of road. The roughest forty miles on the road is that last described, from the Tennessee State line to this place, it is tunnel and cut, and fill, and bridge, continually. It is the roughest and most costly forty miles of road on the line. The grading, masonry and bridges alone cost, respectively, $1,747,160, $387,719.63, $228,662. Add the ties and iron and you have a very expensive forty miles of road. But it could not be avoided. The mountain difficulties had to be overcome—mountain of difficulties I was about to say—and what seemed impossible to some is now done. Section 160 has a tunnel—small, but it was very troublesome during its construction. Passing over some tolerably heavy work, we come to another tunnel on 164, and then still another long one on section 165; on section 174, two more. Emory river is crossed (section 177), on an iron bridge—a small but beautiful structure. Two massive piers shoot out of that beautiful stream, and are seemingly as strong and durable as the mountain sides that look down upon them. This brings us to the end of the county, but for reasons which will become more obvious as we progress, let us take another step into Roane county. On section 178 is located "Keegan's tunnel," the sole contractor being of that name. Mr. Keegan had a whole section (one mile), 1,900 feet of which was under ground. Coming down Emory river, the road crosses that stream at "the Gap, (Emory Gap) and plunges into the bowels of a swell of ground, which obstructs its entry into the Tennessee valley. A tunnel was required and "bored" rapidly—two shafts were sunk, and the work progressed in both of these and at each end. This was one of the most difficult tunnels on the road. Every foot of it was arched with timber or masonry. About 1,300 feet of the roof of the tunnel was decomposed shale; this was arched with masonry and thus rendered permanently safe. The remaining 600 feet was sandstone and limestone, and arched with white oak timber. North of the bridge last mentioned, the road runs along Emory river

for about fifteen miles. This last nineteen miles of road (Keegan's tunnel north) required very heavy work—there being seven tunnels. Darting in and out of these holes every few minutes will produce strange sensations in the mind of the traveler. He won't know whether he is on the earth or under it. Beginning at the south the first of these is 1,900 feet long—this I have dwelt on before—the second is 1,671 feet long; it cuts off a sharp bend in the river. There is a curve at each end, so that you cannot see through, and when you are in the center, you cannot see out. We carried a light through to look at the work. It is a complete tunnel, if I am a judge of such a thing. The next tunnel is two hundred and fifty feet long. The next is two thousand and twenty-two feet long. The next three are the last of the seven, and are, respectively, 846, 699 and 255 feet long. This tunnel work was more backward than any of the rest of the work. These are all the tunnels on the nineteen miles of road first above Tennessee valley. Enough, think you? I should say so. Never was I so impressed with the magnitude of this work as when passing along on the road-bed, looking up to the mountains on the right, and down into the river on the left. And a beautiful stream is the Emory; clear as crystal, and dancing over the rounded rocks with a perpetual song. Aside from the tunnels already described, much of the work in this part of the country is very heavy. It mostly lies along Emory river and at the base of the mountain. The river affords a descent down the mountain, which is strikingly suitable. But for this stream I do not believe that human ingenuity could devise a way over the mountain barrier. The contract price of grading these nineteen miles was $1,136,320.35, and masonry, $275,247.03; total, $1,411,567.38. This, of course, includes all the tunnels—in fact the whole work, except a few bridges, not counted in, which were not expensive as the streams are not large. In other words, the nineteen miles through the Emory river country cost very nearly as much as the seventy-six miles from Emory river to Chattanooga. Or thus: nineteen miles of grading here cost $1,136,320 and twenty-one miles just below, $152,103. There is a difference in country for you. It is the eight tunnels that are so expensive. We have already taken a step into Roane county, so need no further introduction, it is in fact a country of "hidden treasures." The act establishing Roane county was passed the 6th of November, 1801, and took effect the 20th of December, 1801. At that time it embraced what is now Morgan county. In 1819, when the Indian title to the land on the south side of Tennessee river was extinguished, Roane county was extended on the south side of Tennessee river, and Morgan was stricken off. Since then, 1870, Loudon county was formed, taking off about five districts. It is bounded on the north by Anderson and Morgan, on the east by Knox and Loudon, on the south by Loudon, McMinn and Meigs, and on the west by Rhea and Cumberland counties. Topographically, Roane is very much like Rhea, to the description of which county the reader is referred. It contains a geat deal of broken and untillable land. The entire face of the country, with the exception of a few valleys and the bottom lands along the river is rolling. The hills and ridges contain large quantities of timber, and are profitable for grazing purposes, and especially for fruit raising. In many instances they abound in rich deposits of iron ore and coal. In fact the minerals are regarded as adding greatly to the natural wealth of the county; a fact which has already arrested the attention of some heavy capitalists, who have made large investments in the iron business. Rockwood, near the Tennessee river, has become noted within the last two or three years as a manufacturing point. But the other day it was a naked spot with scarcely a house or even a mark to identify it. Now it is a busy, bustling, thriving place, with a population of more than 1,500, and with hotels, schools and churches. It has sprung up as if by magic, and is increasing in importance every day. There is but the one reason to assign for this unprecedented prosperity, and that is the magnitude of the iron interest. But this, really, is only the beginning. Other manufacturing interests equally as important will spring up in other localities of the county. It bids fair to become the great iron center of East Tennessee, and will, therefore, be one of the richest counties in our section. The agricultural interests of Roane county have suffered somewhat from a too careless mode of cultivating the soil. Fertilizers have been sparsely used, deep tillage, to a great extent, neglected, but a small per cent of clovering and grassing, and an exhaustive process perpetuated by raising too much corn. Much of the soil is already exhausted by this unnatural system of husbandry. Better views, however, are beginning to prevail, and the reasonable hope is entertained that wiser council will soon gain the ascendancy. A new element of population has been thrown into the midst of the old, with more advanced ideas, and with more enterprising habits. This element is mostly from the Northern States. The county is greatly deficient in good stock. A few farmers alone have taken it upon themselves to introduce a better race of cattle, hogs, sheep and horses. Thus far nearly all the stock is of the scrub species. It is not because the farmers are not able to buy better stock, for there is considerable wealth among them. It must be the lack of enterprise. Limestone is abundant—it crops out in the valleys—it makes the best of lime, which can be manufactured at a nominal cost. Every farmer,

almost, in the county could afford to make this important element available on every acre of his land. The soil, except on the table land, has a clay subsoil. The clay is tenacious and will hold fertilizers of any description. Where there is such a fine clay subsoil, and such an abundance of limestone, so that it is obvious that any of the grasses would grow to great perfection in that portion of the county, and if farmers would pay more attention to the cultivation of the grasses, either for grazing or soiling purposes, they would find it far more remunerative than raising so much corn. The average production of corn to the acre is about twenty bushels; of wheat, about seven; of oats, about twenty-five. All the root crops do well. Improved bottom lands are worth from $50 to $100 per acre; unimproved, from $1 to $30 per acre. There is much land for sale. It can be bought on one, two or three years time, with six per cent. interest. Altogether, there is a good deal of waste land. The county is not thickly settled. There is ample room for hundreds of immigrants, and there is no section where they would be more kindly received. The soils on the table lands do not differ from those described in Morgan county.

The oaks are the prevailing timber, though some pine forests exist east of Kingston. Poplar and walnut are also found. Labor is abundant. Wages range from $12 to $15 per month. The character of the schools is not first class, though improving. The greatest drawback is the want of capital and enterprise. The variety of wheat sown is Red May. Turning plows are mostly used. The farmers are contented; there are no farmers clubs or fair grounds. The principal streams are the Clinch and Emory rivers. The Tennessee river runs through a portion of the county. It is navigable for steamers. The bottom lands on these rivers are rich and productive. The principal town is Kingston, five miles east of the railroad—it has a population of about 1,000 to 1,500, is situated on the confluence of the Tennessee and Clinch rivers, and is an enterprising place. The subjoined letter from E. Colton, Esq, to J. B. Killebrew, State Commissioner, will give information in regard to the mineral wealth of this county. It may be proper to observe that Mr. Colton has spent several months in prospecting this region:

"Roane has as much iron ore as any other county in East Tennessee. It has the White Oak Ridge vein or bed, the Half Moon Island vein, and that at the eastern foot of Walden's Ridge, and one or two other small veins of fossiliferous red hematite. It has beds of hematite (limonite), but only partially opened. The other metals of the county are lead and some zinc. Barytes is found in abundance, and of excellent quality, near the Tennessee river. The county line takes in, for over forty miles, the coal veins in Walden's Ridge, and, for some miles, crosses that ridge and takes in the horizontal veins of the Cumberland table land. Manganese exists in great abundance but of poor quality. Several points in the county furnish excellent marble—white and varigated. Thus it is seen that the county is very rich in the two great minerals—iron and coal—and it is no wonder that a man, of General Wilder's shrewdness, should select it, above others, as the location of his furnace. It is very safe to say that every five miles along Walden's ridge, in this county, affords sites equally as good, or better, than Rockwood, on account of streams coming from or through that ridge. Such excellent locations at the gaps, through which flow the Big and Little Emory rivers, are yet unoccupied. The county is watered by the Tennessee and its tributaries, the Clinch and Emory rivers, the last of which is navigable about eight months in the year, and the first, all the year, though some improvements are needed to make them perfectly safe. The county seat, Kingston, is located at the junction of these rivers with the Tennessee, and has, in that fact, a more advantageous location than any place in the United States, not excepting Pittsburg. Yet the place is little more than a country village. The cause of this is, that, having the rivers, its people did not care for the railroads, and hence, in this fast age, it has been passed by, while towns of inferior advantages have sprung up and flourished. If half the money, which has been spent on the Monongahela, the Allegheny, and the Ohio, was expended on the Tennessee and its tributaries, these streams would be permanently navigable, and the river trade again become great, and such localities as Kingston attract the attention they deserve. It is roughly estimated that, during the past winter and spring, over 200,000 bushels of grain passed Kingston in flat boats. In past days these boats went over the Muscle Shoals, and frequently out of the Tennessee to New Orleans. Now the changes of the Shoals compel them to take the more costly railroad routes at Chattanooga. Coal was formerly boated from out Poplar creek—Winter's gap– to Huntsville, and other towns in Alabama, and sold there at not over twenty-five cents per bushel, and a profit realized. Glancing at any map of this vicinity, we see that Kingston is so located as to make tributary to herself, with proper enterprise, all the vast products of a large area. Within five miles by land, and ten miles by water, are the Wilcox coal mines; a little farther up the Emory river other veins in Walden's ridge are accessible, as well as the horizontal veins of the Cumberland table land. Poplar creek affords nearly as good access to the Winter's gap coal. With the expenditure of a small amount of money, the Coal creek coal might, all the year, be brought down the Clinch at less rates than it is now transported by rail, and large loads

of it have been brought down during the winter just passed, on the high water. By these same streams the fosiliferious red hematite, brown hematite, or limonite, clay carbonate, and black band iron ore may be brought down to Kingston, and, the peculiar location of the town is such that, whether in the Tennessee or Clinch, the water is always calm, thus affording excellent harbors. From the east or north-east, the Tennessee comes, having, within a distance of eighteen miles by land, received its tributary, the Little Tennessee, from which latter stream may be derived the magnetic and specular ores of iron, roofing slates, soapstones, &c. Within two miles of the town, immediately on the Tennessee, is the White Oak bed of red fossiliferous hematite ore, which is noted in Alabama (at Cornwall and Red Mountain) as making a quality of iron which has not been surpassed for car wheel purposes, and cannon made from it during the late war, came out triumphantly from the most severe tests. The same ore is found on the Clinch, above Kingston, and runs in Roane county, a distance of near thirty miles. The climate of Kingston and of the whole county, is mild in winter, and equable in summer. The peculiar advantages of the town caused it to be selected as the first capital, but it was soon abandoned as there were not then houses enough to accommodate the delegates; it was also selected by the United States government as the site of their chief fort in operating against the Indians, and from a fancied resemblance to the "Pride of the Hudson," as well as the impregnable position, it was called Southwest Point. The Cincinnati Southern Railway "Board of Trustees" propose to build a branch from Emory Gap, via Kingston, to Loudon or Lenoirs, to connect with the railroad from Knoxville to Charleston. This will eventually be built.

There are two or more groups of mineral springs, to which persons resort during the heated term."

The following letter written by General J. T. Wilder, treats rather of the whole Tennessee valley, than of this county particularly, yet it keeps Roane county well in view; so we will insert it in this place:

"East Tennessee is a high valley, with an elevation of 1000 feet above the sea, running north-east and south-west about 280 miles from Chattanooga, on the southern line of the State to Bristol, at the north-eastern end the line of Virginia, with an average width of sixty miles. It is bounded on the south-eastern side by the lofty chain of the Unaka range of mountains, reaching sometimes an elevation of over 6,000 feet above the sea, with numerous gaps, through which frequent rivers flow to the north-west. Still further to the south-east, about fifty miles in North Carolina, is the unbroken chain of the Blue ridge, over 6,000 feet high. On the north-western side of the valley is the level-topped Cumberland mountain plateau, sixty miles wide, with its south-eastern side next to the valley of East Tennessee. For a distance of 130 miles from Sale creek (thirty miles above Chattanooga) to Cumberland Gap, it is tilted up or folded back against the horizontally stratified Cumberland mountains. This uplifted edge is called Walden's ridge, and is the south-eastern limit of the great Apalchian coal field, which runs entirely across the State, from north-east to south-east, with an elevation of 2,000 feet, and an average of sixty miles wide by 100 long, making a coal field of nearly 6,000 square miles or 3,840,000 acres; exceeding by 454,000 acres the entire coal area of Great Britain, including England, Scotland, Wales and Ireland.

The valley of East Tennessee is corrugated throughout its entire length, with a number of low ridges running parallel to each other north-east and south-west with the valley. The rivers, from the valley of western North Carolina, at the base of the Blue Ridge, cut through the Unaka chain, and through the numberless ridges of the valley, until they unite in the Tennessee river, at the base of the Cumberland coal field, following which to the southern limit of the State at Chattanooga, the last named river suddenly turns its course and hews its way through the Cumberland chain to the north-west. Here, in the heart of the great valley of the Mississippi, it offers its clear, deep current to bear the commerce of 15,000 miles of navigable waters; back through 800 miles of cotton and corn fields, through five great States, to its mountains of coal and iron, veins of copper, placers of gold, and hills of marble, in a climate like Northern Italy; adding, with its branches, 1,800 other miles of navigable waters to the wonderful network of great rivers that form the national highways, for the products of more than half the States of the Union, and bearing a tonage greater than that of any nation of Europe. This wonderful valley of East Tennessee is lowest near the base of the Cumberland mountain, containing the coal fields on its north-west side. All its streams head in North Carolina and Western Virginia, and drain north-west into the Tennessee, each river forming a natural highway down stream to the coal fields. Nearly every ridge in the valley contains minerals of some kind, the cuts through which the rivers flow, forming natural opening to the veins of iron ore, which outcrop in nearly every ridge, whilst the great Allegheny chain, is ribbed and seamed with veins of iron ore of nearly every known variety. From the same range are taken large quantities of copper, at Ducktown, whilst all along its northern base, runs a

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great broad belt of roofing slate and most beautiful black marble, intersected with snow-white veins. Along the base of the Cumberland range runs, entirely through the State, a low range or ridge of about 200 feet altitude, above drainage, containing invariably two veins of red fossiliferous iron ore, varying in thickness from three to ten feet, cropping out through the crest of the ridge on its southern slope, and dipping at an angle of about forty-five degrees to the north-west. It is supposed to extend under the coal field; at all events, it crops out at precisely the same geological horizon on the opposite side of Walden's ridge, in Sequatchee valley and in Elk valley, opposite Knoxville, localities 100 miles apart, each ten miles from the place of disappearance of the ore at the south-eastern base of the mountain. The coal in Walden's ridge is a dry semi-bituminous, or rather, semi-anthracite, working raw in the blast furnace, and requiring, at Rockwood, about two and three-fourths of a ton of coal to smelt one ton of pig metal. The ore averages a yield of sixty per cent. of iron, and the sub-carboniferous limestones furnish ample and excellent fluxing material, requiring twenty to twenty-five per cent. of flux. Nowhere along this long line of 160 miles is it more than half a mile from the iron ore to the coal beds, while the massive limestones are invariably between them the entire distance. The coal at Rockwood is very much disturbed, varying from one to 100 feet in thickness. Our No. 1 furnace has been in blast most of the time for over four years, making a fine quality of pig iron for rails, with only one kind of ore. No. 2 furnace, of forty tons capacity, will be put to work early in the spring, when we will turn out, with both furnaces, seventy-five tons of pig iron per day. No. 2, turned out an average of 30 tons per day, though as high as forty and a half tons had been the result of twenty-four hours work. At the base of the Unaka chain, on the south side of the valley is a wide chain of high knobs, in many of which are wonderful beds of the finest brown hematite iron ore, some of which contain manganese. In the Unaka chain are inexhaustible veins of brown hematite, and in the high mountains of the Blue Ridge, are large veins and lodes of magnetic iron ores. All these must go with the rivers to the coal fields on the north-west side of the great valley, for this reason—that it requires one ton and a half of good iron ore to make one ton of pig iron, and it takes about three tons of coal to reduce it, and three to four more tons of coal to convert and finish it into bar iron, thus using seven tons of coal to produce one ton of merchantable iron, and one-third of a ton of limestone, making in all seven and a half tons of fuel and flux. These are found contiguous to large and persistent beds of iron ore, only requiring a mixture of one-half of the brown hematite and magnetic ores to make merchantable iron, fit for any use in arts and commerce, and giving the advantage to manufacturers located near the coal, in proportion to the greater tonnage of fuel and flux used, to the vastly lesser weights and freight of ores required to produce one ton of iron; in other words, saving in the production of pig iron one-half of the transportation, and in bar or plate iron, or nails, nearly five hundred per cent. This is the advantage enjoyed by the manufacturers on the north-west side of the valley, over those located on the south-east side, where are plenty of ores and no coal. Thus is insured to the north-west side of the valley, along the route of the Cincinnati Southern Railway, a continuous line of works and a dense producing population. A few words might be added, giving a geological outline of a cross-section of this valley, and its mountains on either side. Commencing in North Carolina, with the range of the blue ridge, an enormous Eszoic upheaval ribbed with iron ores; thence north-west, crossing granite formations to the metamorphic rocks of the Smoky or Unaka chain, walling long veins of copper and iron ores; thence through great beds of roofing slate, across the Silurian ridges of the broad valley, to the single lines of Devonian shales, at the base of the Cumberland. In the steep wall of this mountain you cross three workable veins of finest coal, cropping out above drainage, and reaching the level top of the coal fields, having, in less than 100 miles, passed from the lowest prem-a tive rocks, across the Metamorphic, Silurian, Devonian, and carboniferous formations. These turned up on edge show all the wonderful provisions of nature in minerals, ready for the hand of man, deposited and hidden in the past ages, but unsealed and opened by the Creator's engineers and contractors, the earthquakes of the past and rivers of the present, and asking in mute eloquence for the mind and hand of man to take from their abundance and make them useful.

These ranges and valleys are in a climate unequalled in salubrity and average comfort of temperature—the driving storms of the great plains of the north-west being shut off by the continuous chain of the Cumberland mountain, and the raging gales of the Atlantic seaboard stopped short of our valleys by the range of the Blue Ridge and Unakas. These causes render this high mountain-walled valley not only more temperate in winter, but much cooler in summer, than any valley south of the great lakes, or east of the Pacific coast, and free from malaria, while the great number of medicinal springs of almost every known variety or property, makes our valleys a favorable resort for persons seeking either health or pleasure."

STATISTICS OF ROANE COUNTY IN 1870.—Improved land, 102,502 acres, worth $2,587,-

423, which, with all farm productions, &c., amounts to $3,207,191; live stock, $520,488; horses, 3,390; mules, 604; milch cows, 3,064; working oxen, 827; sheep, 10,552; swine, 17,661; wheat, 74,814 bushels; rye, 1,527; Indian corn, 505,590; oats, 112,029; tobacco, 350 pounds; wool 14,027; sweet potatoes, 11,609; population, 15,622 in 1870. The railroad here has an expensive structure near each end of Roane county—the tunnel already mentioned at the north, and a bridge over White's creek at the south, which forms the boundary line between Roane and Rhea counties. This is a deck bridge of three spans, having a total length of 284 feet. There are 800 cubic yards of masonry. The construction between this and the tunnel is perhaps lighter than the average. After leaving Keagan's tunnel, we find ourselves running through a valley. This lies east of the Tennessee valley, along which we pass with one intervening ridge. Another ridge lies between this valley and the Tennessee river. From Rockwood to White's creek the ridges run in, and nearly fill up, the valley. Sometimes the valley is made up of a few level areas lying between the broken ridges. These little valleys take every form, the spurs coming down from every direction, like the points of a star. Clumps of dark, thick forests are scattered at intervals, with small patches of cleared land. Turnpike creek, which rises above Rockwood, winds its course around the numerous spurs and along fruitful basins. I long to begin again, as it were, upon a new description of this wonderful country, but space will not permit, so we will not tarry longer in this county but pass into the next.

Rhea County was established December 3, 1807, and the county-seat was located at Big Spring, fourteen miles west of the present capital. It was removed to Washington in 1812. The county has a population of about 5,000. It is thinly settled. The majority of the farms are very large, and could be divided and sub-divided advantageously. This would make room for immigrants, and in a short time double the population. It would tend to develope the county and increase its wealth. It is suffering for the lack of population. Laborers are needed; men of capital and enterprise are in demand, and better farmers are wanted. The area of Rhea county is divided between the valley of East Tennessee and the Cumberland table land. Its north-western boundary rests on Walden's ridge. This plateau ridge being divided about equally between Rhea and Bledsoe. Its south-eastern boundary is the Tennessee river, which separates it from Meigs. On the north-east it is bounded by Roane, the county we have just left, and on the south-west by Hamilton. Between Walden's ridge and a series of broken knobs, parallel with it, is a long valley running the entire length of the county, which constitutes a part of a great valley extending through the State, and closely hugging the eastern escarpment of the table land. The Tennessee river meanders through rich alluvial bottoms. White's creek, Muddy creek, Piney creek, Town creek, Wolf creek, Clear creek, Yellow creek, Big and Little Richland, and Sale creek, thread various portions of it. River valley is one of the most noted in East Tennessee. It is formed by the Tennessee river. It is wide and runs the entire length of the river, and the soil is a rich alluvial the average production of corn is about fifty bushels to the acre, wheat ten, oats twenty. The Tennessee valley is wide and long; has an excellent sub-soil, and well adapted to all the cereals and to the grasses. It is not so productive as the river valley, but it has advantages in the way of good water, and free from destructive overflows. Its average production of corn is about twenty-five bushels to the acre, wheat ten, oats twenty, Irish potatoes about seventy-five and sweet potatoes about 150. Muddy creek valley is another fine body of land. The price of land ranges from five to one hundred dollars per acre. The average size of farms is about 400 acres. This is unusually large. It is a serious injury to the county, and tends to keep it down. They should be divided into smaller tracts, a lesson hard to learn. Rhea county shows rough usage in the management of its soils, caused, in part by the owners having more land than they can well cultivate. There is not half enough clover sown, and manures are applied in the most stinted manner. Hundreds of acres have given way under this injudicious treatment. There is, however, a change for the better, apparent in this fine country. Deeper ploughing is done, more grass seed is sown, better stock is being raised, wheat drills are coming into use, and a better class of agricultural implements generally, is brought into requisition. Considerable quantities of land are rented or leased in this county, and this has had a damaging effect on the soil. Under the present system of renting, there are no lands which can long survive it, and besides the policy of turning over a business to some one else, that ought to be attended to by the person himself, is suicidal. The disposition to lease farms, and to pull up stakes, and settle in towns and villages, or to embark in some other enterprise, is having a bad effect upon the agriculture of the country The labor system is not reliable. There is no lack of it, but the trouble is in retaining it. The farmers throughout the county complain bitterly of this difficulty. Laborers shift, going from one place to another. This subverts all the plans of the farmers, and subjects them to a vast deal of inconvenience and irreparable loss.

The overshadowing feature of this county is its iron and coal interests. They do not

exist in spots, or here and there, but they are found almost everywhere. Walden's ridge is filled with masses of iron and coal. They are found almost side by side both in the mountain and in the valley. These wonderful interests have not been developed to any extent, though attracting now a good deal of attention. On Clear creek a valuable property has recently been sold to a northern company. At Smith's Cross Roads an English company has made a purchase. At the mouth of Piney river there is a valuable iron property. Caldwell's Forge is turning out considerable quantities of iron. Mineral springs are numerous all over the county The Rhea Springs have attained a wide celebrity for their healing virtues. We will give a full description of this pretty place further along. The scholastic advantages of the county are fair. The free school system works well. There are no schools of high grade.

There are no finer lands in the world than those on the Tennessee river, and the easy access to market by way of this river, makes them exceedingly valuable. At all seasons of the year steamers make constant and regular trips to Chattanooga, where a connection is formed with the roads leading into Georgia, and, indeed, into all the Southern States.

The railway runs through this county, keeping to the valley the entire distance, having Shinbone ridge between it and the mountain, and numerous ridges lying between it and the river, amongst them Black Oak ridge. No town of any note lies on our route in this county, excepting Rhea Springs and Smith's X Roads.

RHEA SPRINGS lay on a broad, flat plain, seven or eight miles wide. Through this plateau land Piney flows on its way to the Tennessee river. Spurs run from the north and south and cramp in the plateau at a few places to less than half a mile; at other places the distance between the heads of the spurs is from three to four miles. These springs are situated about the center of this flattened area, near the banks of Piney, and quite a little distance east of the railway. For many years these springs have been a favorite resort during the summer months. The water is alkaline, though called sulphur, the principal ingredients being sulphate of lime, sulphate of magnesia, sulphate of soda, silicate of soda, with a little salt. The water is said to have a healthy effect upon the stomach and bowels. It is shipped to nearly every State in the Union. A small village has sprung up at the springs, and presents quite a neat and tasteful appearance. Beautiful shade trees embower every cottage, and the green grass covers the surface of the ground, giving a pleasing and attractive appearance to the surroundings. Piney, which flows through the village, is bountifully supplied with fish, the principal species being the black bass, red horse, perch, drum, cat fish, buffalo, jack and river salmon. On the mountains and ridges game is abundant. Deer, wild turkey, squirrels, hares and partridges are numerous. Occasionally a bear or wild cat is met with. The population of Rhea Springs is about 400. There are, in the place, about four stores, one drug store, two blacksmith shops, one wagon shop, three boot and shoe establishments, two harness shops, one tin shop, one flouring mill, one photograph gallery, one cabinet makers shop, three churches, one livery stable, one masonic lodge, and one hotel capable of accommodating 125 persons.

In addition to the above, we will insert a letter from Mr. Wasson, the proprietor of the Springs.

"Your favor of the 14th inst. is at hand. In reply to your request for 'information relating to these Springs, and the adjacent country, value of land, mineral resources, &c.,' I present herewith such information as I think may be acceptable to your business people, or those looking to this section for future homes. Rhea Springs are located in Rhea county, in the beautiful Tennessee valley, about equal distance from the Tennessee river and the mountains. The water is celebrated for its healing virtues in all diseases of the stomach and bowels, it has been resorted to for many years by the people of the Southern States, for the cure of these maladies, with great success. A village has grown up around these springs. The inhabitants are intelligent, courteous and thrifty. The population numbers about 400. We have four stores, two physicians, two smith shops, four house-builders, 3 boot and shoe shops, 2 harness shops, tin and stove shop, fine flouring mill run by water power, one photograph gallery, one cabinet shop, three churches—Baptist, Presbyterian and Methodist—lodge of Master Masons and Royal Arch Chapter, one livery stable, "The Tennesse Valley Agricultural and Mechanical Association" holds its annual fairs at this place. Four large and fertile counties are represented yearly at these fairs.

The Cincinnati Southern Ry. runs through the entire length of this county, parallel with the Tennessee river and mountain. The valley, between the river and the mountain, varies from four to twelve miles wide. The river bottoms are very productive. Corn, wheat and the grasses grow to great perfection. The valleys back of the river produce corn, wheat, oats, apples, peaches, grapes, and potatoes. The mountain produces apples, grapes, potatoes, cabbage and the grasses to great perfection. Water of the very best kind is abundant everywhere. River bottom land, improved, sells for $30 to $75 per acre, the valleys from $5 to $25, and improved mountain land from $5 to $10, unimproved $1 to $3—all good titles for the above prices. The climate of this section is mild; cattle will

do well on the mountain grasses and mash till December. In the river hills iron ore is found in great abundance, in the Cumberland mountain and its spurs are found coal, iron, and limestone. Our coal is good and burns free, leaving white ashes; the cost varies from $4.50 to $5.50 per ton delivered. No regular mines are opened, the farmers get it out in seasons when they are not engaged on their farms, and haul it to town with ox teams, &c.

We have public schools in nearly every civil district. The blacks enjoy equal educational facilities with the whites. Wood is abundant and cheap, and sells for $1.50 to $2.00 per cord. Meats of all kinds are cheap and good; fat beeves sell for four and five cents, dressed; pork six cents, and mutton four cents; flour from $2.00 to $3.00 per hundred, butter fifteen cents, eggs ten cents, chickens twelve to fifteen cents, turkeys thirty-five to fifty cents.

When the Cincinnati Southern Railway is open, your city will reap a rich harvest from the Southern country. The trade that is now going all to Baltimore, New York and the East, will naturally flow into your city. New enterprises will spring up along the eastern slope of the Cumberland mountains, then will be increased consumption for all the manufactures of your city, and in return, we will send you the products of the farm, dairy and forest. In the matter of improved agricultural implements alone, this section will take large quantities, and you will want our early vegetables and fruits.

It is hardly necessary to dwell at any length upon our mineral resources, they are so grand and so well known."

Running southwardly from Rhea Springs to Clear creek, which is three miles below, we cross the foot of numerous spurs shooting out from Shinbone ridge into the valley, forming a succession of swelling tongues, with gentle slopes. Much of the farming lands here have been badly worn. Red hills and gullies disfigure the farms. Clear creek breaks out from Walden's ridge, about forty-seven miles above Chattanooga. It supplies some tolerably good water powers. In the chasm formed by this stream four good seams of coal may be seen, the thickest of which is said to be six feet. The mountain escarpment between the two last named streams is about 500 feet high, but back a mile or more it rises 300 feet higher, forming a beautiful table land upon the higher plane. On Piney four seams of coal are also seen, and, judging from their respective elevations, are identical with those at Clear creek, thus forming, between the two streams, a splendid coal field, which could be worked on three sides. The thickness of the upper seam is four feet of good block coal. Two hundred feet below is a seam three feet thick, corresponding with the Rockwood seam. The coal in this is soft and easily crushed. The valley ridge opposite this coal area flattens down towards Rhea Springs. On the eastern side of the Tennessee valley, valley ridge, the southern continuation of which is called Black Oak ridge, rises near here and runs nearly parallel with the railway. The soil is flinty and unproductive, and the timber upon it is not very heavy, but there are some farms upon it. It is excellent for fruits and wheat. Running along near the foot of Black Oak, we find a beautiful country, the valley is a mile or two wide. The surface, at intervals, swells into gentle hills with wide fertile lowlands between. Little Richland creek, a confluent of Big Richland, rises nine miles north of Smith's X Roads, our next stopping place, and by many a convolution winds beside the fertile pastures, and adds beauty and attractiveness to the pastoral scene. It gathers in its course, from numerous springs, water enough to drive grist mills. Better farms and better farm houses appear in this section than in those heretofore spoken of. An air of thrift is everywhere seen, and the farms are well stocked with everything necessary to insure success in their calling.

Shinbone ridge skirts the mountain with a few low gaps which give access to Back valley. It is more subdued here than below, and some of its slopes have been brought into cultivation. Back valley, lying between this and the mountain, is very trough-like and narrow.

This region is well watered by springs which break out from Valley ridge and from the mountain. Limestone, freestone, and chalybeate waters are often found within a short distance of each other.

It may be mentioned that the mountain lying on the west of the railway, in this section, is settling up rapidly by persons who propose to make fruit raising a specialty. Grapes, peaches, plums and apples are all said to do well, and a large planting has been made of these during the past four years. As soon as the building of the railway became an assured fact, the planting of orchards began, and I was assured that thousands of acres would be in bearing in a few years in this section, and within five miles of the railway. A large amount of land will also be devoted to the growing of onions and Irish potatoes. Wild grapes grow profusely upon the top of the mountain, and ripen in such abundance as to become an article of trafic. The farmers in the valley usually have their timber supply on the ridges. Our next stopping place is

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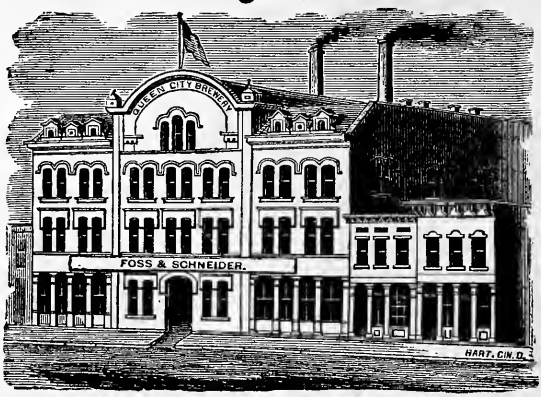

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SMITH'S CROSS ROADS.

Here the ridge on the east forms a comparatively level plateau, nearly two miles across, and the Tennessee river bottoms lie at its eastern base. The numerous river ridges below appear to have united to form one wide one at this place. The soil of this ridge is flinty, but productive. It is said to be well adapted to the growth of fruit. The surface immediately around Smith's Cross Roads is very level and beautiful. It is, indeed, a deeply sunk basin, with high ridges and sharp hills bounding it on every side. On the west is Shinbone ridge, a flinty elevation, from 200 to 300 feet above the valley that keeps its course parallel with the mountain. Between Shinbone ridge and the escarpment of Walden's ridge is Lone mountain, an isolated peak about two miles long at the base and one mile wide. It rises to the height of 780 feet above the valley and reaches its highest elevation toward its northern end. Its southern extremity slopes gently down to Sale creek. A low, long spur, a ligament from its northern end, connects it with Walden's ridge on the west. This spur or ligament forms the northern boundary of Cransmore's Cove, Lone mountain and a small ridge hemming it on the east, and Sale creek and Walden's ridge on the west. It is accessible only by going up Sale creek. This cove is from three to four miles long, and from three-fourths to one mile wide.

Smith's Cross Roads is a village of 200 inhabitants and contains an academy, four stores, one blacksmith shop, one boot and shoe shop, one wagon making and one saddlers' shop.

Passing now to a consideration of the beds of iron ore in this section, we find both the fossil ores and the brown hematite in considerable abundance, Directly east of the point where Richland creek leaves the mountain, the dye-stone ore is found in Shinbone ridge, outcropping on its western slope, and dipping, as usual to the north-west. The ridge containing it is low, as compared with the Dyestone ridges in other places. There is also an absence of the white oak mountain sandstone, which, wherever it prevails, is mountain making in its character. The fossil ore, as it occurs in this locality, is inter-stratified with beds of grayish slate. The first point examined had a thickness of only nine inches, which was well exposed by a drift which had been run into the hill for fifteen or twenty yards. The seam shows great contortions and numerous plications rising up in short folds, wrinkled like the folds of a great curtain, having a general dip, however, of about seventy degrees. The line of strike runs about north twenty degrees, east about parallel with the general course of Walden's ridge.

A few miles below Smith's Cross Roads and we cross the county line into Hamilton, the last county on our route, as it contains Chattanooga, the southern terminus.

A few more lines before we bid good-bye to Rhea. The length of the road through this county is 32.23 miles, of which 19.39 were donated to the road. The alignment is simply splendid, being nearly all the distance practically a tangent or straight line. Its cost of construction also was very low, the greatest expense being the following iron bridges, viz: Two through spans over Piney creek, 202 feet long, with 600 cubic yards of masonry—one span of eighty feet over Little Richland creek, two spans of eighty feet each over Richland creek with 500 cubic yards of masonry; one span of fifty feet over Sale creek, also two of thirty feet each over the same with 400 yards of masonry.

HAMILTON COUNTY was erected out of Rhea, under an act of the Legislature, passed Oct. 25, 1819, which provided, "that the territory south-west of Rhea and south and east of Bledsoe and Marion counties, should constitute a county by the name of Hamilton, in honor and to perpetuate the memory of the late Alexander Hamilton, Secretary of the Treasury of the United States." The said act further provided, "that the said county of Hamilton shall be bounded as follows, to wit: Beginning at a point at the foot of Walden's ridge, of Cumberland mountain, on the east side thereof; thence running to a point on the Tennessee river, two and one-half miles below the lower end of Jolly's Island so as to include Patrick Martin in the county of Hamilton; thence south thirty-five degrees east to the southern limits of this State; thence west to the point where the Marion county line intersects said southern boundary; thence north-eastwardly with Marion county line to Bledsoe line to a point opposite the beginning, and thence to the beginning" The seat of justice was subsequently established at Dallas. About half of the county thus formed, and all of the county on the left banks of the Tennessee river, lay within the territory of the Cherokee nation. The white inhabitants of the county continued to occupy the lands on the north side of the Tennessee river, until the removal of the Indians, which was effected under a treaty concluded between the United States and the Cherokee nation, Dec. 29, 1835. After the extinguishment of the Indian title, the lands south of the Tennessee river were rapidly taken up.

GEOGRAPHY AND TOPOGRAPHY OF THE COUNTY.—Hamilton is one of the southern tier of counties, situated near the south-east corner of the State, and north of the north-east corner of the State of Georgia. The county is bounded as follows: on the north by

Rhea, on the east by James, with the Tennessee river separating the two counties from Harrison, to the northern boundary, on the south by the States of Georgia and Alabama, and on the west by the counties of Marion, Sequatchee and Bledsoe. The county is oblong, extending about twice as far from north to south as from east to west, and embraces about 360 square miles. So far as the general topography is concerned, it may be remarked that the valley and ridges all have a north-easterly trend, preserving a marked parallelism throughout.

PRINCIPAL STREAMS.—The Tennessee river, after running along the eastern border of the county for about fifteen miles, turns its course through the county from north-east to south-west for fourteen miles, until it strikes the base of Lookout mountain, from which it turns and pursues a north-west course for about seven miles, until it breaks through the mountain range, at what is known as the "suck," on the Marion county line. From this point the river pursues a winding, but a south-west course, forming the boundary between Marion and Hamilton counties. The Tennessee has an average width of 1,500 feet, and in this county is navigable for steamboats during the whole year. The obstructions at the Suck, and other points, have been removed, or nearly so, by the general government. All the other streams of the county are tributary to the Tennessee river. The principal ones are Lookout, Chattanooga, Citico, and South Chicamauga creeks, from the south-east; and Suck, Mountain, North Chicamauga, Soddy, Possum, Rocky and Sale creeks, from the north-west. The larger of these creeks are navigable for flat boats and rafts, and are made use of for taking out timber, minerals and produce.

LOOKOUT MOUNTAIN commences at Gladsen, Alabama, eighty miles from Chattanooga, and terminates in what is known as Point Lookout, near the south-west corner of the county. This mountain is about 1,600 feet high at its extreme elevation above the Tennessee river at its low water. The mountain spreads out as it extends south into an undulating surface, a large portion of which can be cultivated and is well timbered, and watered by numerous streams.

WALDEN'S RIDGE extends the whole length of the county, and bounds the valley of the Tennessee on the north-west. It rises abruptly to an elevation of 1,000 feet. The county line runs on the top and near the center of the ridge, which is from five to fifteen miles wide. The land is cultivated and is well timbered and watered.

Lookout mountain and Walden's ridge are outliers of the Cumberland table lands. White Oak mountains occupy a small space in the south-east corner of the county. Raccoon mountains extend into the south-west corner of the county. Missionary ridge, commencing at South Chicamauga creek, near the Tennessee river, rises to the height of 300 to 500 feet, and extends in a southerly direction into Georgia. Its elevation is gradual, its top rounded and soil generally fertile. The valley of the Tennessee, between the river and Walden's ridge, is broken by ranges of hills, known as first and second ridges, which follow the general course of the valley, and which are separated from the table lands by the "Back" valley, south of the Tennessee, and beyond the valley of the river, the country is broken by minor ridges.

PRINCIPAL VALLEYS.—The famous and fertile valley of the Tennessee is first in importance. This extends the whole length of the county, on the right bank of the river, and on both sides of the river from Harrison to the Georgia line. Lookout valley, on the west side of Lookout mountain, extends from the Tennessee river, at the point of this mountain, near Chattanooga, in a south-west direction into Alabama. Chattanooga valley, between Lookout mountain and Missionary ridge, extends from Chattanooga, in a southerly direction into Georgia. Chicamauga valley to the east of Missionary ridge, extends from the Tennessee river into Georgia, and constitutes, in that State, what is known as "McLemore's Cove." The Back valley lies between Walden's ridge and a group of minor ridges running parallel therewith.

ROADS AND BRIDGES.—One of the best natural roads in the country is the "Dry Valley road," running through the county on the north side of the Tennessee river. The other roads on this side of the river are in better condition than elsewhere in the county. Sufficient labor has not been expended on the roads throughout the county. With respect to bridges, the county is not behind the times. All the principal creeks will soon be spanned by the most substantial structures where they are needed. There are now constructed, or in the process of erection, six wrought iron arch bridges They have a span of seventy-five to one hundred and fifty feet. The six bridges cost about $30,000.

GENERAL FEATURES.—The main stream, the Tennessee, and the main ridges and valleys of the county, have the general course of the Appalachian range, and presents the general features of that region. The sharp deflection of the Tennessee, at Chattanooga, to the north and west, changes somewhat the configuration of the southern portion of the county. The tributaries of the Tennessee river, rising in Walden's ridge, on the right of the river, run from north-west to south-east, and cut through the minor ridges of the main valley. On the left of the Tennessee river the tributaries flow into it from a south-

westerly direction. In the south-eastern portion of the county, the elevations are generally continuous; in the north-western portion they are more "knobby." The valleys and coves formed by the different ridges are, generally, susceptible of cultivation, and, frequently, their soil is very productive. The valleys and ridges, together, present a variety of soils and conditions, suited to all kinds of agricultural and horticultural products.

GEOLOGY OF THE COUNTY.—The geological formations of this county are exceedingly varied; commencing with the Knox dolomite, and ending with the coal measures. They embrace ten distinct groups or divisions, viz: Beginning with the Knox dolomite, the lowest, which we find in the valley lands, we next come to the Trenton Nashville limestones, in the valleys and Missionary Ridge; then the dyestone or red iron ore group, mainly in small ridges, followed immediately by the Niagara limestone, black shale and the silicians, or St. Louis limestone, mountain limestone, which forms the base of the mountain, and lastly, the coal-measures, which cap Lookout and Raccoon mountains and Walden's ridge. It may be noted here that Lookout mountain rests in a synclinal trough, or one in which the strata dip—from both sides to the center, forming a trough. It may be further remarked that on each side of this mountain is a skirting ridge, rough and sharp, formed by the tilting outcrops of the silicious group, the dyestone or red iron ore and the black shale, just as if the weight of the super-incumbered mountain had bent this flexible mass in the center, and caused the edges to turn up. Missionary ridge is formed by the outcroppings of the Knox limestone and dolomites, its eastern slope and continuous knobby belt of country to the east of the ridge, being covered with the flinty masses and gravel of this formation. Between Missionary ridge and Chattanooga the rocks are Knox dolomite, Trenton and Nashville limestone, forming a wide rolling valley. This valley belt, further north, is covered with rounded, flinty hills, making it a knobby region. Will's valley, on the western side of Lookout, shows mainly outcrops of Trenton and Nashville blue limestone rocks. On the west side of this valley, at the foot of the table land, and forming a skirting ridge, the dyestone group again appears. Perhaps more than one-fourth of the county belongs to the coal-measures, which furnish a large amount of good coal.

SOILS.—The soils of the county may be classified, generally, as river and creek bottom, second bottom, upland and table land. These general classes are not uniform, but present a number of varieties. The bottom lands are alluvial, generally, with a clay sub-soil. Some bottom land, known as "crawfish bottom," is regarded as having little value. This land, in its natural condition, is wet and acid. It only needs to be drained and supplied with lime, or other alkaline fertilizers, to be made productive and valuable. Some bottom lands have been cultivated year after year without rest or rotation; then, again, only the surface has been used without any mixture of the sub-soil, by deep and thorough plowing. With these exceptions, the bottom lands are very productive. With respect to the exceptions named, the lands can easily be restored to their original productive capacity by correct management. Little or no fertilizing is needed.

THE SECOND BOTTOM, in some places, is a clayey loam, and, in other places, a sandy loam. The remarks above, in regard to the condition of the first bottom lands, apply also to these lands. The soil of the second bottom is not so deep nor strong as that of the first. Manure can be used to advantage. Compost is especially beneficial to the sandy loam, and "summer fallowing," and the turning under of clover, to the clayey loam of these lands.

THE UPLANDS OR RIDGE LANDS constitute a large portion of the county. The soil is thin, and in some places poor. These lands are not so much affected by a dry season as naturally would be supposed. With careful tillage and intelligent management, they can be made to produce well. For stock farms and grazing purposes they are well adapted. The soil on the ridges, north of the Tennessee river is frequently impregnated with iron, and by the addition of the proper ingredients, is fitted for special crops.

THE TABLE LANDS constitute the plateau of Lookout mountain and Walden's ridge. Notwithstanding their elevation, the soil is a sandy loam. Fine crops are raised on these lands, although they can be much improved by fertilizers of the proper kinds. These lands are specially valuable for the raising of stock, particularly sheep, for grazing purposes, and for the cultivation of fruit and potatoes.

THE CLIMATE AND THE SEASONS.—The climate throughout the year is mild and invigorating The extremes of heat and cold are not known. During the winter there is usually, but not always, a light fall of snow, which disappears in a day or two. Throughout the summer the nights are cool and comfortable. Lookout mountain and Walden's ridge are noted resorts for invalids and pleasure seekers from different parts of the country, during the summer season.

Chattanooga is becoming more and more the home of those who require a mild and healthful climate during the winter. The beautiful weather of autumn usually extends to Christmas. From that time to the middle of March there is some cold and considerable

rainy weather. The spring and summer seasons are at least a month earlier than in the northern and eastern States, which gives the advantage of an early market to those engaged in agricultural and horticultural pursuits.

AGRICULTURAL PRODUCTS.—Corn, wheat, oats, barley, beans, peas, tobacco, the different grasses, broom corn, potatoes and almost every variety of produce can be cultivated with success. Certain localities are better adapted to certain crops.

GRAPES AND WINE.—The cultivation of the grape, and the production of wine are destined to become very important and extensive occupations in this locality.

TIMBER.—This county is well supplied with white and black chestnut, red and post oak, yellow and long leaf pine, cherry, hickory, ash, birch, locust, iron wood, gum, black walnut, maple, beech, red cedar, holly and white and yellow poplar.

PRICE OF LANDS, RENTS AND WAGES.—The valley lands are valued at $8 to $25 per acre; occasional farms, which have been well cared for, at $30 to $40 per acre. Good lands, near Chattanooga, command higher prices, and some have been sold as high as $200 per acre. Ridge and mountain lands are valued at $1 to $5 per acre. The size of farms range from 200 to 1,000 acres. Good farm houses and buildings are not common. With some notable exceptions, the farmers have not cultivated their farms to the best advantage. With the proper attention and study given to agriculture, the farms will be made more productive and valuable. Good grape growing land can be bought for $5 to $15 per acre. Very favorable locations near Chattanooga are valued higher. Mineral lands are very cheap in some places, being nothing more than wild lands. Mineral lands in the vicinity of good sites for furnaces, and with means of transportation near, are held at higher, but not uniform prices. A large portion of these lands have been rented for the purpose of mining, or the mineral right has been purchased. These "leases" or "rights" are often on the market. Without any exodius of the people, there is a large quantity of land for sale and for rent, in the county. Rents, when for cash, are from $3 to $5 per acre. Usually the landlord receives half the products of the land, when he furnishes the material and stock, and one-third when the tenant furnishes the same.

Wages of farm hands vary from $8 to $16 per month when they are boarded, and $16 to twenty-five when they board themselves. Farm labor is not abundant. The wages of mechanics, in the city, range from $2 to $4 per day, according to the season and demand. In rolling mills and manufacturing establishments, skilled workmen receive from $3 to $8 per day. Laborers, in same, receive from $1 to $1.50 per day. House servants are paid from $4 to $8 per month.

POPULATION.—At the time of the organization of the county, in 1819–20, the inhabitants numbered 821; in 1860 the population numbered 13,258. According to the United States census for 1870, Hamilton county contained, in that year, 17,241 inhabitants; this number is said to have reached, in 1877, 25,000.

The construction of the railway through this county is more expensive than through Rhea, having, besides several minor crossings, the Tennessee river to span and the naturally expensive approach into Chattanooga. Its alignment also, for the same reasons, is not near so straight; we begin to find sharp curves in one or two places, at least we call them sharp, in comparison. I believe the sharpest curves at this place are 6's—that is, a deflection of six degrees to the hundred feet. The length of the road through from the Rhea county line to Chattanooga is 31.87 miles, of which 14.18 were donated. Beginning again at the Rhea county line, we will attempt a short description of our route.

Some excellent farming lands are seen in this section. Wide-spreading, level meadows and rich undulating fields are seen on both sides of the road. The St. Louis limestone, with its characteristic sink holes, lies on the road, and supplies a strong fertile, soil. The timber upon this soil is very valuable. Large poplars, red oaks and white oaks are abundant, and will furnish a large amount of first class lumber. In some of the bottoms below the St Louis limestone the Nashville and Trenton rock appears.

Four miles from the county line brings us to Rocky creek, a beautiful mountain stream, which has made a dip gorge in the mountain side, affording some of the wildest and most romantic of scenery; this, like the majority of such places, is heavily timbered. The Sale creek coal mines are in this vicinity. Rocky creek runs out at right angles from a series of broken knobs bordering the main mountain, and empties into Sale creek one and a half miles below these mines. Near the base of the mountain it has three branches, one coming from the north, one from the south, and one from the west. These streams all unite back of the range of hills, and near the base of the mountain. Near this mine is a village of about 500 inhabitants, mostly Welch. It contains a school house, a church, store, post office, two blacksmith shops and a carpenter shop. It lies considerably to the west of the road. The ridges between the Tennessee river and the mountain, at this place, appear to have been swept away during the course of ages by the waters of Rocky and Sale creeks. A bottom, covering some nine square miles, has been thus formed. Its surface is generally rocky, especially near the base of the mountain; so much so, indeed, near

the mountain, as to render it unsuitable for tillage. As the distance from the mountain increases, the surface rocks disappear, until a very fair farming area is presented, and some very good farms are seen, though but a small proportion of the surface has been cleared. During the summer months the water in Rocky creek becomes very low, forming a succession of deep pools, joined together like necklaces by a trickling stream. The bed of the stream is exceedingly rough with water-worn boulders. For water power, Sale creek and its tributaries are worthless. Large bodies of limestone occur in the second parallel ridge from the mountain. The strata are all inclined to the north-west. The quality of the stone for making lime is good, but owing to the prevalence of seams and fissures it is not suitable for building purposes.

We cross Rocky creek on an iron through span bridge of 100 feet span, with 350 yards of masonry. Passing on now over light work, through four miles of pleasing landscapes, with mountain and ridges on our right, and low ridges and bottoms to the left, we come to O'possum creek, which is spanned by an iron through span bridge of 100 feet length on 300 yards of masonry. This stream, though a wet weather stream, like Rocky creek, or Soddy, four miles further on, has left its deep gulf in the side of the mountain. It is also a tributary of the Tennessee.

Soddy creek is crossed on an iron through span bridge of 150 feet in length, resting on 800 yards of masonry. Soddy is a small tributary of the Tennessee river; it has two forks, the more southern being called Little Soddy, and the more northern, Soddy, that being considered the main stream. Both of these branches have carved deep notches in the side of the mountain. On the side of the gulf formed by Little Soddy, 600 yards from its confluence with the main stream, four miles west of the Tennessee, eighteen miles north-east of Chattanooga, and within half a mile of the line of railroad the Soddy mines have been opened—eight seams of coal being seen here. A mining village has sprung up in the valley below the mines, beyond the line of railroad. It has a post office, two stores two schools, two churches and a population of about 200.

After passing the village, Soddy cuts through a series of ridges nearly at right angles, making a bottom of moderate width to the Tennessee river. The bottoms on the latter stream are very wide, and of unbounded fertility. Probably there is no soil in any State that matures such large quantities of Indian corn. About 500,000 bushels are shipped annually from the different landings between Chattanooga and Kingston, nearly all of which is raised on the Tennessee bottoms and islands. The productiveness of these bottoms may be inferred from the fact that from fifteen to twenty bushels per acre is the rental price, the latter for island farms. Some of these island farms have been sold since the war for prices varying between $100 and $200 per acre. The large overflows which deposit a great amount of sediment, keep the soil in a high condition of fertility and permit it to be cultivated every year without any apparent diminution in its productive capacity. The great difference in the producing capacity of the Tennessee bottoms and those lying at the foot of the Cumberland table land, arises from their inherent difference in constitution. The former are fed by the limestone bluffs that overhang them, as well as by the sedimentary deposits from the river; the latter have no new supplies of fertility. The cherty ridges on the east, and the sandstone bluffs on the west, are deficient in plant food, and the bottoms lying between, lack the calcareous element so necessary to a prolific yield of the cereals.

A large proportion of the good timber of the valleys has been exhausted. The bounding ridges and mountain sides, however, supply it in any desirable quantity. The yellow pine is abundant. This is converted into lumber, and sold at the saw mills at $15 per thousand; white oak from $10 to $12.50 per thousand. A small quantity of walnut and ash are found in the coves of the mountains, between Chattanooga and Soddy creek, but not in sufficient quantities to deserve special mention.

Eight miles from Soddy, we cross North Chicamauga creek several times on two 100 feet spans of iron through bridges, and two thirty feet spans of iron deck bridges, making a total length of bridging at this place of 260 feet. North Chicamauga has several tributaries from the north. Among them are Hog Pen branch, Four Mile branch, Yellow Spring, Cooper creek, Panther creek and Cane creek. These streams have cut deep furrows in the mountain, which are difficult to pass. They are from 100 to 500 feet deep. Up near their sources are some level bottoms bordering them, but most generally their banks are precipitous. Cane creek, one of the largest tributaries of North Chicamauga, flows in a very deep, narrow chasm, much like a canyon. These bluffs are of sandstone, and often overhang their base fifteen or twenty feet. Talus has accumulated at the base of these bluffs so as to give a slope to the water's edge. This talus-slope is fringed by trees forming a green tortuous line in summer, several hundred feet below the general top of the plateau. When once in these gorges, one has to walk, often-times, many miles before any place of ascent can be found.

Crossing the North Chicamauga, near the location of the railroad bridge, and ascend-

ing the mountain by a very steep pathway on the right, we get first upon a bench about two-thirds of the way to the top of the mountain. The surface of this bench is covered with a luxuriant growth of wild grasses in summer, which supply ample forage for great herds of cattle. The woods are open, no underbrush anywhere obstructing the view. The overlooking bluffs are of shelving sandstones, where many rock houses are seen—natural shelters for stock against the heats of summer or the chill winds of winter. Reaching the top of the mountain, which is here, as measured by the barometer 1,134 feet above the valley, we find the surface very level and well timbered with chestnut oak. The conglomerate rocks are everywhere displayed, sometimes rising up above the surface in great masses, the erosion curving them into many fantastic shapes. This stretch of level land extends from the gorge of the North Chicamauga to Soddy creek, about eight miles, with scarcely a break that would interfere with the construction of a railroad. The soil on this plateau is rather better than most of the soil of the table land.

On Poe's turnpike, which forms the highway from Dunlap in Sequatchee valley, across Walden's ridge, to the Tennessee valley, a few farms of moderate fertility are met with. Upon these farms are grown wheat, sorghum, corn, oats, Irish potatoes, beans, cabbage, and garden vegetables generally. The soil, however, is not well adapted to the growth of Indian corn and sorghum. Apple trees flourish, are long lived and bear well. Peaches, it is said, do better here than on the western side of the mountain. Herdsgrass springs up spontaneously, and is the main reliance of farmers for hay. Clover, by the application of a small quantity of gypsum, proves a profitable crop, both as a fertilizer and for grazing. Upon clover sod a fair crop of Indian corn or wheat may be grown. Some good farmers upon the plateau make from twenty to thirty bushels of corn per acre, though the usual average is not above six or eight. The timber supply is ample. Large white oaks, easily rived and of a toughness that makes the timber of especial value for the wagon maker, are numerous. Yellow pines, two and a half feet in diameter, are found in clusters. Chestnut, chestnut oak, red oak, black oak and gum grow everywhere in profusion. Walnut occurs in the coves, and sometimes, though rarely, upon the top of the mountain. Chinquapins, and chestnuts are so abundant as to form articles of export. On this charming plateau, between North Chicamauga and Soddy, a curious lake occurs, not far from the northern bank of the Chicamauga, a ridge, elevated considerably above the general level, overlooks the Chicamauga gulf on the south; half a mile north of this ridge, there has been a drop in the mountain, exposing a perpendicular sandstone bluff, 100 feet high. The lake lies at the foot of this bluff, and is deeply set in the bosom of the mountain. In shape it is elliptical, and resembles a large tureen embedded in the plateau. The water is at least fifty feet below the top of the surrounding bluffs, and the edge of the water can be reached only by a precipitous path on the eastern side. The lake is 100 yards in its longest diameter and about seventy-five yards in its shortest. Its depth is unknown—no rude plummet of the mountaineer has ever been able to fathom its waters, though many attempts have been made. The water is very cold, and of a sky-blue color. It never becomes muddy even in a rainy season. It has no perceptible outlet or inlet. During the dry months, in summer, the water recedes some two or three feet, leaving exposed a narrow rocky beach next to the steep walls that environ it. The surface of these walls is beautifully scolloped by the motion of the water. Viewed from above it appears motionless and looks as though no wind could ever ruffle its calm, clear surface. No fish disport in its waters, and yet it would seem to be a very paradise for the trout, for the rearing of which it will no doubt in time, be utilized.

The last coal of importance that presents itself is on Walden's ridge, eight miles north-west of Chattanooga, and quite as far from the railroad, though within three miles of the Tennessee river. It belongs to the upper coal measures, and outcrops at the foot of a ridge 110 feet high, which rests on the general level of the table land, which is here 1,000 feet high. This ridge extends towards the north several miles and is about half a mile wide at the base, supplying a large body of coal, the seam is three and a half feet thick, and an entry has been driven in at the eastern foot for the distance of fifty yards. Some 15,000 bushels of coal have been taken out and hauled in wagons down the mountain to Chattanooga. It is a hard, free burning coal, though containing some sulphur. Underlying it are several feet of good fire clay. The roof is of black shale, and is quite solid. All the strata are horizontal. The mine is known as Crow's bank. If proper facilities were afforded for conveying the coal to the valley below, this mine, owing to its proximity to Chattanooga, would, doubtless, prove very valuable. Below the bank, on the south, is the cliffy rampart that makes such a prominent and striking feature in the escarpment of the table land. Underlying this cliff-rock another seam appears, three and a half feet thick. The coal is very hard.

It has already been stated that Back valley and the Tennessee valley unite where the Chicamauga breaks from the mountain. The gulf made by the Chicamauga is deep and wide, forming a chasm much like an inverted roof, though sometimes the bluffs of sand-

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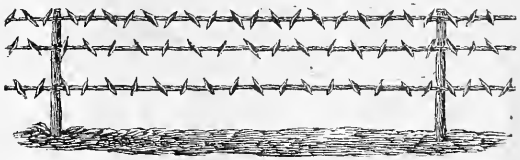

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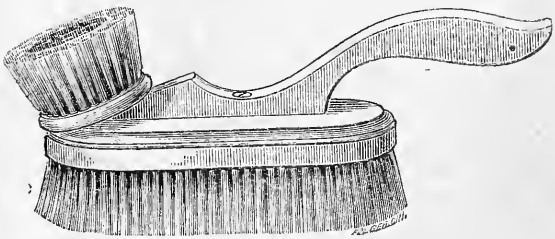
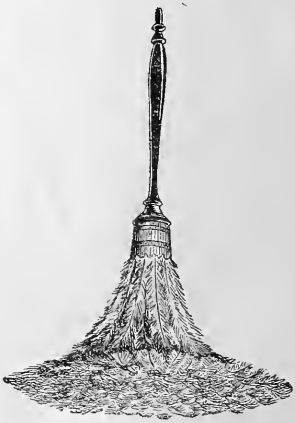
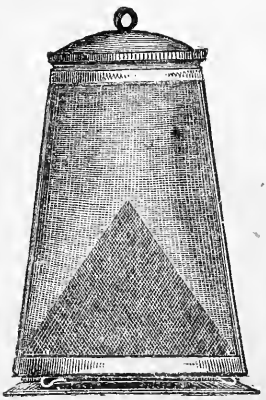
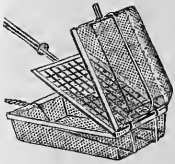
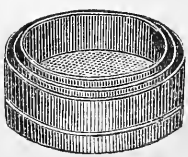


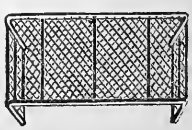




PARAGON FLY-TRAP.







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THE NIGHT ALARM.

stone rise boldly up for several hundred feet. Rodger's creek, which is a tributary of Chicamauga, makes also a deep chasm in the mountain parallel with Tennessee valley, leaving a high, narrow headland between it and the valley which narrows to a sharp ridge, where the waters of Rodger's creek and Chicamauga unite. Each one of these chasms exposes the coal seams and makes them accessible. Branch railroads may be constructed up these gorges, so that the coal may, by chutes, be dumped directly into the cars.

Fallingwater, another tributary to North Chicamauga, and south of Rodger's creek, rises upon the plateau of Walden's ridge, and flows in an easterly direction, making a gorge of increasing width and depth as it approaches Back valley. Reaching this it turns north, running about a mile when it cuts through Back valley and Shinbone ridge, passing in a south-easterly direction through Tennessee valley into North Chicamauga. The point of its confluence with the latter stream is ten miles (north twenty degrees east) from Chattanooga. When Fallingwater breaks through Shinbone ridge, there is a bluff which shows an anticlinal fold, the rocks dipping at an average angle of thirty-two degrees to the north-west and south-east. By the confluence of Fallingwater with North Chicamauga a sufficient volume of water is obtained to run machinery. Two mills are in operation between this point and the mouth of North Chicamauga.

Five miles in a southerly direction from the crossing of North Chicamauga creek, through low bottoms, brings us to the Tennessee river. This is the largest tributary of the Ohio, and so far as volume of water and length are concerned, it is as much entitled to be called the main stream as the Ohio. It is, in many respects, a remarkable stream. It drains an area of 41,000 square miles, and its total length from the source of its longest confluent to the mouth is 1,100 miles. Its fall within that distance is 2,000 feet, and its average width is 1,500 feet. Rising in the south-west portion of Virginia, and bearing the name of the Holston until its union with the Clinch, near Kingston, in Roane county, it sweeps down the valley of East Tennessee in a rapid current until it passes Chattanooga, a short distance below which it breaks through Walden's ridge in tumultuous whirls by a series of bends, into the Sequatchee valley, where the current grows less turbulent, flowing quietly down this valley for a distance of sixty miles, and at Guntersville, Alabama, takes a direction nearly west by north. Between Lauderdale and Lawrence counties, in Alabama, 330 miles below Knoxville, it spreades in a broad, shallow expansion called Muscle Shoals, flowing over flint and limestone rocks for twenty miles, forming an almost insurmountable barrier to navigation, yet affording some of the very finest water privleges. On the Mississippi line, at Chicasaw, it turns north-west, and forms the boundary line between Alabama and Mississippi; and after a circuit of 300 miles in Alabama, re-enters Tennessee, flowing north, and emptying into the Ohio river at Paducah, Kentucky, 800 miles from the union of the Clinch and Holston rivers.

The Cincinnati Southern Railway crosses the Tennessee river eight miles above Chattanooga, on an iron bridge 1,801 feet long, from center to center of abutments. Besides which there are eight piers and two "rest" piers for the draw. The draw is 125 feet in the clear. There is one 250 feet span for steamboats when the draw is not needed. Taking distances from center to center, there are six through spans of 207 feet lengths, one through span of 256 feet, and one draw of 280 feet, making a total length, as before stated, of 1,801 feet. The masonry on which this superstructure rests, was very difficult and was the means of nearly "breaking up" a half dozen contractors before its completion—there are 9,372 cubic yards of it.

On the next section we cross the Chicamauga river, on a three span bridge of 324 feet in length, the superstructure resting on 2,000 cubic yards of masonry. Two of these spans are sixty feet long, each, (deck) and one is a through span of 200 feet length. Immediately upon leaving this creek we make connection (by means of a "Y") with the Western and Atlantic Railroad, of which we will speak hereafter.

Some four miles now brings us to the corporation line of

CHATTANOOGA.

J. B. Killibrew, A. M., gives a very full and concise history of Chattanooga, which we might do well to insert here, however, it is so lengthy that we, having so little space at command, will be content with taking such extracts therefrom as will best suit the nature of our work.

"The country in and around the present city of Chattanooga was occupied by the Cherokee Indians until 1837. In 1837 a post office was first established at this point, which was then called Ross' Landing. In the same year a town was laid off and divided into lots, and the Indian name of Chattanooga given to the place. In 1841 it was incorporated as a town. For the next twenty years, until the commencement of the civil war in 1861, Chattanooga increased in importance as a trading point and railroad center. During that period, all the railroads now leading to the city were completed, except the

Alabama and Chattanooga Railroad, which, however, had been commenced at this place under the name of the Wills' Valley Railroad. Chattanooga was incorporated as a city in 1851, at which time the population was about 3,500. During the civil war nearly all the business houses and private residences were destroyed and the inhabitants scattered. The close of the war left Chattanooga nothing more than a military post—without business, without buildings, and without inhabitants. What the city is at present it has become since 1865. During the last twelve years the population has increased to 15,000. Invited by the genial climate of this region, and influenced by the importance of this point as a future trade center, the increase of the population, and the development of the business of the city has been rapid. At the same time the growth of the city has not been spasmodic but substantial. During the year 1873 there was invested in the erection of manufacturing establishments, the sum of $175,000, and as much more in the construction of dwellings. The inducements offered by Chattanooga and the surrounding country for every kind of enterprise, are as real as they are unusual and flattering.

CHATTANOOGA AS A DISTRIBUTING POINT.—Chattanooga commands the great valleys of the Appalachian region, which extends through Virginia, Tennessee, Georgia and Alabama. The ridges and valleys of this region converge at the point where this city is located, and are there cut through by the Tennessee river. The topography of the country is such that no practical connection of the Northern and Southern system of railroads is present except through Chattanooga. This city is also situated upon that part of the Tennessee river which must form a part of a through line of water communication between the North-western and South Atlantic States.

CHATTANOOGA AS A MANUFACTURING POINT.—Chattanooga possesses all the elements necessary to make it a great manufacturing center.

1. It has a healthy location and a salubrious climate.
2. It has ample facilities for transportation and distribution.
3. Its market for all manufactures is near and large, and the demand constantly increasing.
4. It is immediately surrounded by all the materials, inexhaustible in quantity and superior in quality, which enter into the production of the leading manufactures. After what has been said elsewhere, it is not necessary to specify all the advantages offered by Chattanooga and the surrounding country for almost every kind of manufacturing enterprise.

With reference to the manufacture of iron, the advantages are so unusual that it seems as though nature, in the combination of the material elements here made by her hand, intended this point to be the great center for its production.

Chattanooga situated near the Allegheny coal fields, possesses the element first in importance in the economical production of iron, viz: good coal, abundant and cheap.

Veins of iron ore underlie the very city, divide the surrounding hills, and stretch away into the regions beyond, side by side with the veins of coal.

In juxtaposition with the coal and iron, are found the sandstone and fire clay, necessary in the construction of furnaces, and the limestone necessary for the smelting of the ores. Over these treasures grow forests of valuable timber. These wonderful mineral deposits have already attracted the attention of manufacturers and capitalists, both in this country and in Europe, and large investments have been made and important enterprises have been organized.

The cost of transporting the iron ores to the manufacturing centers of the Northern States, will make Chattanooga, in no distant future, the Pittsburg of the South, and the Birmingham of America.

THE FUTURE OF CHATTANOOGA.—The lumber trade of this city will necessarily swell into large proportions. It is estimated that within the region of country tributary to Chattanooga there are 5,000,000,000 feet of lumber of the more valuable varieties. This trade already extends to the Northern and Eastern States. A cotton market of importance would be established at once in Chattanooga upon the erection of a cotton compress, with a supply of capital to make purchases or advancements. A large amount of business which now goes through and around the city, would then be transacted here, this being the natural center for collection and shipment.

By the removal of the obstructions to the navigation of the Tennessee river at Muscle Shoals, this river will be open throughout its whole length to the trade of the country. Thus cheap transportation will be afforded for all the heavy articles of commerce, and a line of water communication can be provided between the great North-west and the South Atlantic and Gulf States. The time is not far distant when the varied products of the soil, the mine and innumerable furnaces and manufacturing establishments, and the commerce which will course through the natural channel of trade, will make Chattanooga the metropolis of the central South.

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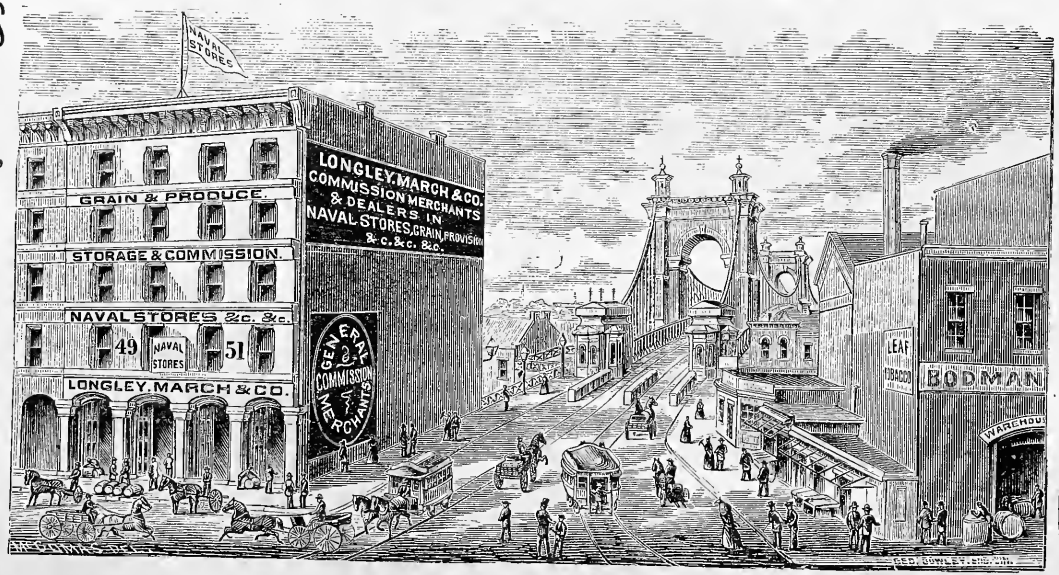

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CINCINNATI.

The "Queen City of the West," is situated in North Latitude 39°, 6′, 30″; and in West Longitude 84°, 26′, and stands upon the northern bank of the Ohio river, in the South-western part of the State bearing the same name. It occupies a lovely valley nearly twelve miles in circumference, surrounded by a circle of beautifully wooded hills, averaging three hundred feet in height. This valley is nearly equally divided by the Ohio, and the northern half is occupied by Cincinnati, while on the southern half lie Covington and Newport, separated by the Licking river. Its site is exceedingly picturesque, and at the same time most practically advantageous for commercial and manufacturing purposes.

It was first settled by white men in 1788. In December of that year, about twenty hardy pioneers floated down the Ohio among the masses of moving ice, and landing opposite the mouth of the Licking river, built their cabins, and marked out a town. Matthias Denman of New Jersey had bought eight hundred acres of land there for about two hundred dollars, then a fair price; and this party of brave men planted themselves upon it with his assistance, and in his interest. Similar adventurers from New Jersey and Pennsylvania were at this time making their way in parties, down the Ohio (or, in Indian parlance, "the beautiful,") river, and whenever a number could be gathered sufficient to defend themselves against the hostile and treacherous Indians, they founded settlements here and there along its banks. President Washington sent a few companies of United States troops for their protection, and the important question arose as to where those troops should be posted. The major in command was at first disposed to establish them at North Bend, a few miles below Cincinnati, but while he was selecting a position there for his fort, he fell in love with the handsome young wife of one of the settlers. Her husband consequently, removed his family from that point, and went to that which is now known as Cincinnati, whereupon, the Major became disgusted with North Bend, and ultimately decided that the upper location was the most suitable station for his fort. He therefore moved his troops there, built a fort, and thus that neighborhood became the safest spot below Pittsburg, (or, as it was then called, Fort Du Quesne.) Another interesting incident in the early history of Cincinnati is connected with the manner in which the city received its name. The tradition is, that the early settlers appointed a committee of one to name the place. The person who composed this important committee, had once been a school teacher, and he pressed into service on this occasion, all the learning of which he was master. He wished the title of the future city to express the momentous geographical fact, that it was situated opposite the mouth of the Licking river. He knew that "*Ville*," was French for "city," that "*os*" was Latin for "mouth," that "*anti*" might mean "opposite to," and that "L" was the initial of Licking. Combining all these items, he finally produced the mongrel word "Losantiville," which was duly accepted as the name of the village, and by which name it appears on some of the earliest maps of Ohio. Some time afterward, however, the settlement received a visit of inspection from General St. Clair, who pronounced its name absurd, and after laying out a county of which the village was the only inhabited spot, he called the county "Hamilton," in honor of his friend, Col. Hamilton, and changed the name of the settlement from Losantiville to Cincinnati, after a society of which both he and Colonel H. were members.

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PIKE'S OPERA HOUSE.

In the summer of 1790, Cincinnati consisted of about forty log cabins, two small frame houses, with a population of about seven hundred inhabitants, and a fort garrisoned by a company of United States troops. A few cumbrous flatboats crept heavily up, or floated slowly down, the broad bosom of the Ohio, requiring weeks of time to make the trip between Pittsburg and Cincinnati, all the while exposed from either shore, to the fire of the treacherous savage. The first improvement in navigation was made in 1800, when a couple of keel boats were built, which were furnished with bullet proof covers and port holes, and were provided with cannon and small arms. Wayne's victory at Fallen Timbers brought security to the Miami country, and proved a turning point in the destinies of the little struggling village. Settlers began to flock there from the East, and the population increased so that in 1810, there were nearly three thousand inhabitants. The next year the first steamboat appeared on the Ohio, and not long after, several were built in Cincinnati. From that time the commercial prosperity of the city was secured. Traders and manufacturers began to open large establishments there, and the wonder daily grew, that the advantages that Cincinnati offered in this respect should have been unnoticed so long; being, as it was, the only spot along the Ohio, where a city could conveniently be built, and also, nearly midway between the source and mouth of that river.

Cincinnati proper, now extends along the north bank of the Ohio river, from the village of Columbia on the east, to that of Riverside on the south-west. Its length is over ten miles and its width over three miles. The business portion is principally on and near the river, comprising a distance of about three miles, from Deer Creek on the east to Mill Creek on the west. Several adjoining villages have been annexed to the city since 1868, including Columbia, Walnut Hills, Mount Auburn, and Cumminsville. Its population, with that of its suburbs is now about five hundred thousand. Manufactories appear in all parts of the city, and business generally is carried on in all quarters. The value of her manufactured productions alone is about two hundred million dollars per annum. Fine residences are interspersed everywhere, though more numerous in the East and West Ends, and in the suburbs. The Miami canal enters the city from the north-west, and runs south and east through it to the Ohio river. The district north of the canal is called "over the Rhine," and is inhabited almost exclusively by Germans. It is indeed, the Germany of America, being as completely Teuton as if cut out of the Faderland itself. All the great breweries of Cincinnati, are situated here, and the beer-gardens, saloons, concert halls, tow-headed children and white-capped granddames, are as numerous and flourishing as in Deutchland proper, while a stranger may walk the streets of that section an entire day without hearing a word spoken in any other language than the German. Manufactures have been, to Cincinnati, her chief source of success. The banks of the Ohio abound in iron, coal and salt, and these mines together with her rapid development of manufactures, and her unrivaled means of transportation, have proved a most substantial basis for her wealth and increase. Through the means of the Ohio and Mississippi rivers, her commerce extends to nearly all parts of the Mississippi valley, and forms the greater part of that of the Ohio river, which alone, in 1869, was said to be nearly equal to the whole foreign commerce of the United States.

In due succession to the building of steamboats, came the construction of canals, turnpikes, and railroads, and now, including their connections, there are more than twenty thousand miles of railroad leading in and through Cincinnati. Twenty different roads have their terminus at Cincinnati, on which pass, every twenty-four hours, an immense number of passengers and freight trains, connecting that city with the Atlantic cities on the East, the Lake cities on the

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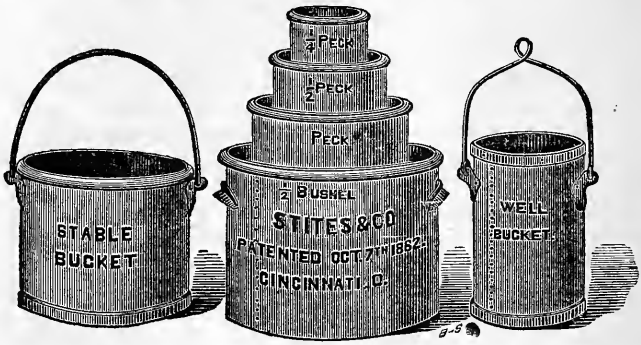

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They are made of a superior quality of Sheet iron, with Wooden Bottoms boundwith Iron before they are put in, and hoops shrunk on same as a tire is put on the wheel of a wagon.

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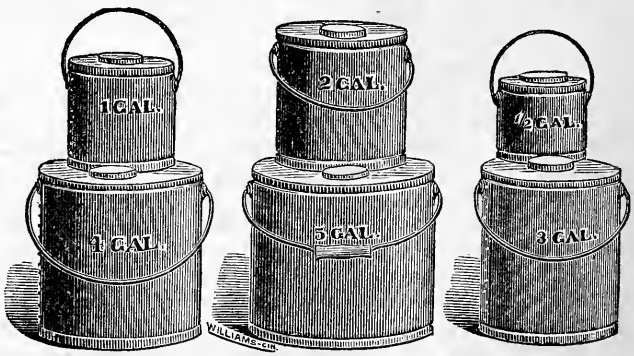

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With Wooden Heads, which require no boxing to ship them; and the paint is always ready for use, in small quantities, by simply removing the bung, stirring up the paint, and painting from the hole; when done, the bung can be replaced, thereby excluding the air until the remainder of the package is wanted, when the head may be removed, thus making a good bucket for paint or other uses. The large sizes, when emptied, make excellent slop or garbage buckets. SEND FOR CIRCULARS AND PRICE LIST. Address

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North, St. Louis and the Mississippi on the West, and on the South with the interior of Kentucky and Tennessee, and then through to the South Atlantic coast. There are five separate Railroad Depots, of which the Cincinnati, Hamilton and Dayton Depot, on the corner of Fifth and Hoadley streets, is the terminus of the Cincinnati, Hamilton and Dayton R. R.; the Atlantic and Great Western, (or Erie,) Railway; the Cincinnati, Richmond and Chicago R. R.; the Dayton and Michigan, R. R; the Cincinnati, Hamilton and Indianapolis R. R.; the Cleveland, Columbus, Cincinnati, and Indianapolis R. R.; the Fort Wayne, Muncie and Cincinnati R. R.; the Cincinnati, Sandusky and Cleveland R. R.; and the Columbus, Chicago and Indiana Central R. R. The Plum Street Depot, corner of Plum and Pearl streets, is the terminus of the Indianapolis, Cincinnati and Lafayette R. R.; the Cincinnati and Whitewater Valley R. R.; and the Marietta and Cincinnati R. R. The Ohio and Mississippi Depot, on West Front street, corner of Mill, is the terminus of the Ohio and Mississippi R. R. The Little Miami Railroad Depot, corner of Front and Kilgour streets, is the terminus of the Pittsburg, Cincinnati and St. Louis R. R.; the Pan Handle route; the Louisville, Cincinnati and Lexington R. R., (or, Louisville Short Line;) the Grand Rapids and Indiana R. R.; and the Chesapeake and Ohio R. R. The Kentucky Central Depot, corner of Eighth and Washington streets, Covington, Kentucky, is the terminus of the Kentucky Central R. R. The Eastern and Western railroad depots in Cincinnati, are connected by a track through the city used only for the transfer of freight.

Though the Cincinnati Southern R. R., is not yet provided with a depot, within the limits of the city, its trains cross the Ohio, and have a terminus at the foot of Eighth street, where passengers and freight are regularly received and discharged. This, however, is but a temporary provision and intended to last only until a suitable location can be secured and a permanent depot built, which will be done within a reasonable time.

The Third and Fourth street line of horse cars runs directly from the Cincinnati, Hamilton and Dayton Depot, to within a square or two of most of the principal hotels of the city, so also does the same line run from within one square of the Ohio and Mississippi depot, and from within half a square of the Plum street Depot. The East and West End street cars are equally convenient from the Little Miami Depot, while hacks and omnibusses are every where as plentifully as blackberries in June.

The hotels in Cincinnati are numerous and excellent, and some of them as elegant and luxurious as any in the world. Of these, the Hotel Emery, in the Arcade Building on Vine street, between Fourth and Fifth, is just completed, elegantly fitted up, and decidedly, one of the best. The Grand Hotel, on Fourth and Central Avenue, is the largest in the city, and is said to have the finest exchance of any in the United States. The Burnet House, on third and Vine streets, was for over twenty-five years, the principal hotel of the city, and its registers bear the names of most of our most prominent celebrities, as well as those of many distinguished visitors from abroad. The Gibson House, on Walnut street, is well and widely known as one of the most ably conducted and well furnished institutions of the kind in the country. The St. James Hotel, on Fourth, between Main and Sycamore, is most conveniently located, and is very inviting in its appearance. The St. Nicholas, also on Fourth street, near the Post Office, is a most comfortable house, and its gentlemen's dining room is made very attractive by a portrait of the beautiful Pauline Bonaparte, painted by Devonje in 1811. Kepler's Hotel likewise on Fourth street, is well managed, and is connected with the famous restaurant of the same name. In the same class we may also name the Walnut street House, the Crawford House, the Galt House, the Florentine, the Merchants' Hotel, the Henry House, the Carlisle House, the Indiana House, the Avenue Hotel, the Madison House, Hunt's

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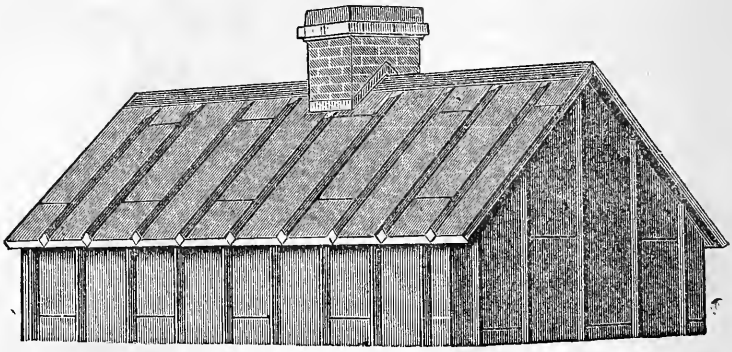

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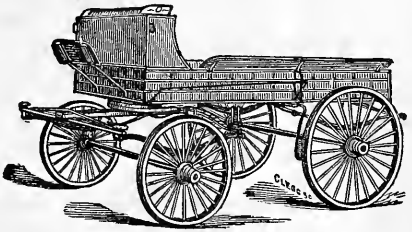

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CINCINNATI, OHIO.

Hotel, and the Broadway Hotel. Besides these, there are many pleasant and desirable boarding houses, centrally located, and excellent restaurants, with neat lodging rooms in their vicinity, in which comfort and economy are combined.

The Street Railroads traverse the city in every direction, and with the Inclined planes, scale with ease and safety the airy heights of the delightful suburbs. The Cincinnati Consolidated Street R. R. Company is composed of six divisions, covering the greater portion of the city; besides which, are the Walnut Hills and Cincinnati Street Passenger R. R.; the Cincinnati Inclined Plane R. R.; Price's Hill Inclined Plane; Columbia and Cincinnati Street R. R.; Cumminsville and Spring Grove Street R. R.; Storrs and Sedamsville Street R. R.; Covington Street Railway; Newport, Covington and Cincinnati Street R. R.; Mt. Adams Inclined Plane R. R.; Cincinnati and Westwood Narrow Gauge R. R.; Cincinnati and Clifton Inclined Plane R. R.; College Hill Narrow Gauge R. R.; and Covington and Cincinnati Street R. R. There are also the Covington, Newport and Ludlow Ferries; with the Newport and Cincinnati Bridge at the foot of Butler street and the Suspension Bridge, (of which see engraving,) at the foot of Walnut street built at a cost of one million, eight hundred thousand dollars. This bridge is one of the finest in America. It springs from the summit of a lofty tower two hundred feet high, near the water's edge, and at one span clears the whole river, and lands upon the Covington tower on the other side. The distance from tower to tower is one thousand and fifty-seven feet, the entire length of the bridge is two thousand two hundred and fifty-two feet; and it is hung one hundred and three feet above low water mark.

Cincinnati has ten Express Companies in full operation, viz.: the American, United States, Adams, Merchants' Dispatch, Transfer, Star Union, South Shore, Fast Freight, White Line Central Transit, and Great Wetern Dispatch. Also, six Telegraph Companies, styled respectively, the American, District, Atlantic and Pacific, City and Suburban, Gold and Stock, Municipal and Counting House, and Western Union.

The city is supplied with water from the Ohio river, by means of pipes and hydrants which convey it to all points. The Water Works are on East Front street and are of immense capacity. They are provided with four powerful pumping engines, averaging a daily supply of nineteen million gallons, which more than meets the general consumption. The reservoirs in Eden Park hold one hundred million gallons each. The cost of the entire works is over four million dollars. Sewers have been extensively built, some of which are fourteen feet in diameter. The whole city is plentifully supplied with gas, the Gas Company being a private corporation whose works and franchises are worth six million dollars.

The Council Chamber, Police Court, and other city offices are brick buildings situated in the City Park. The government is vested in the usual officers, the Mayor, one Alderman and two Councilmen for each ward. The Police, in 1865, were limited to twelve captains, twenty assistant officers, and three hundred patrol men.

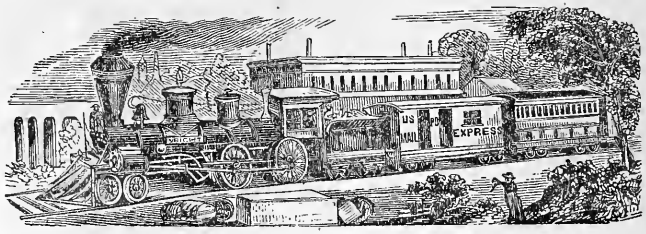
In due keeping with the rapid improvement physically and commercially of this great city, religious, social, and intellectual life therein has been equally progressive, as attested by the one hundred and forty-three churches of different Christian denominations, which adorn the streets. Also, by the superior system of Public Schools, to which was awarded the national premium at the grand examination of such institutions, held at the Centennial celebration at Philadelphia in 1876. In addition to these schools, which are freely and conveniently distributed all through the city, there are six Theological Schools, six Medical Schools, three Commercial Colleges, three Female Colleges, and a Farmers'

College, University, Law school, Dental College and several flourishing Seminaries for both sexes. Eleven daily and thirty-one weekly newspapers, are published in Cincinnati, and also three semi-monthly and forty-four monthly periodicals. Among the daily papers are the Enquirer, Commercial, Gazette and Times, which rank among the leading papers of the day.

There are twenty-three different cemetries, of which Spring Grove, near Cumminsville, six miles from the city, is one of the most chaste and beautiful, as well as one of the largest and most perfectly kept, of the many "cities of the dead," so carefully cherished in our country.

Six excellent hospitals are in constant operation in Cincinnati, of which the Commercial Hospital, (engraving annexed,) situated on the square bounded by Central Avenue, Twelfth, Plum and Ann streets, is one of the most complete and liberal in the United States. It has fifteen hundred beds for patients, and entertains a daily average of two hundred and sixty-seven patients. Every part of it has direct telegraphic communications with the Superintendent's office, the police stations, the city offices and the branch hospital for contagious diseases, on Vine street hill. It is managed by a board of seven Trustees, two of whom are appointed by the Superior Court, two by the Common Pleas Court, and one by the State Governor, while the Mayor of the city, and the Directors of the City Infirmary longest in office, are ex-officio members. It is supported from the city taxes. Pleasantly situated on a grassy hill at the corner of Lock and Sixth streets, is the Good Samaritan Hospital, under the charge of the Sisters of Charity, an order founded in France, in the year 1617. There is also a Foundling Asylum connected with the Hospital, and also managed by the Sisters. St. Mary's Hospital, on Betts street, near Freeman, is a fine edifice, elegantly finished both inside and out. It is conducted by the Sisters of the Poor of St. Francis. The Jewish Hospital is on the corner of Third and Baum streets; St. Lukes's on the south-west corner of Franklin and Broadway, and the Eruptive Hospital on Roh's Hill. In addition to these is Longview Asylum, wherein "the mind diseased" is treated, and oftentimes cured. It is situated at Carthage, ten miles from the city proper, in a most beautiful and healthy location. It was built in 1860, at an expense of nearly half a million dollars, and is supported by Hamilton County. The City Infirmary is another charitable institution, built on a farm of one hundred and sixty acres, on the Carthage road eight miles north of Cincinnati. The buildings are spacious and comfortable, the farm well tilled and very productive, and the school connected with the Infirmary, in a very flourishing condition. The House of Refuge, situated in Mill Creek Valley, is a reform School, for unmanageable children under sixteen years of age. It is managed by a Board of Directors, and is supported by the city at a cost of about fifty thousand dollars annually. The City Work House is an imposing and handsome edifice, on the Colerain turnpike. The grounds are tastefully laid out, and adorned with plants and trees. A large workshop has been added, sufficient for the employment of as many persons as the prison will contain. It is for the reception of men and women convicted of minor offences, and is supported by the city at an expense of about seventy-six thousand dollars per year.

Passing from the works of charity and benevolence, and the necessary reformatory institutions, we find Cincinnati equally well provided with places of amusement and objects of interest. Chief among the latter is the Zoological Garden, which would require many papers to describe, and which must be visited and thoroughly explored, to be appreciated as it deserves. The Tyler Davidson Fountain, on Fifth street, is another feature among her wonders which must be seen and studied, to be sufficiently admired. The engraving we present, gives a view of it from the east, but it is composed of many different parts, each of which is a gem of art in itself.



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The Public Library, seen in our annexed engraving, is one of the noblest and most comprehensive institutions of the kind in the world. It occupies a fine stone front building on Vine street, between Sixth and Seventh, and is at once, one of Cincinnati's greatest attractions and most worthy endowments. It is governed by a committee of seven members appointed from the Board of Education. It was formally opened February 26, 1874, and the whole cost of the lot and building was slightly over four hundred thousand dollars.

The Cincinnati Music Hall, presented in our next engraving, is situated on the site of the old Exposition building, on Elm street. It is not yet completed, but will be ready for occupancy by the time of the approaching May Festival. When finished, it will be a most magnificent piece of architecture of the Gothic type.

Pike's Opera House, also represented by an engraving, is on Fourth street, near the old Post Office. It was built by Samuel N. Pike, and its interior is very exquisitely finished and adorned, while its exterior renders it one of the finest architectural ornaments in the city. It will seat comfortably two thousand people, and has, upon occasion, held over three thousand.

The Grand Opera House, on the corner of Vine and Longworth streets, is a very large and handsome theater, and affords seats for about two thousand people. We also have Robinson's Opera House, which is an elegant and first class temple of the drama. Also, Wiswell's Art Gallery, on west Fourth street, where the painter may study and dream, and the poet find constant themes for his song.

Only a few years ago, the fire alarm sounding at midnight, was a common occurrence in Cincinnati, and many large and disastrous conflagrations were sustained, but with her usual energy, the city has provided her people with a Fire Department, which has long been recognized as the most efficient in the United States. Mr. Abel Shawk, a mechanic in Cincinnati, was the inventor of the Steam Fire Engine, which was promptly adopted by the City Council, and was first employed in that city. It has since been extensively introduced in the other principal cities and towns of the United States. This invention, connected with the Fire Alarm Telegraph, has been very successful in checking and preventing the devastations caused by the Fire-fiend, and gives this enterprising city just cause to be proud of her recognition of the truly valuable invention of her gifted mechanic.

The present Post Office, on the corner of Fourth and Vine streets, is a large building of sawn freestone, three stories high, and of Roman Corinthian architecture. The space, however, is not sufficient for the proper transaction of the Government business for that city, and hence the errection of the new Post Office and Custom House on Fifth street, which extends from Main to Walnut. The entire first story of this immense building will be occupied by the Post Office Department exclusively. We present an engraving of the structure as it is proposed, showing a superb addition to the architectural beauties of the city. The exterior is designed in the Renaissance style, of four super-imposed orders. The principal facade, is three hundred and fifty-four feet long, and is divided into center and corner pavilions, connected by receeding bays. The end facades have corner pavilions only, also connected by receeding bays. The pavilions are strongly marked by porticoes, with full detached columns, and the divisions are rendered more effective by large dormers and prominent roof lines at the corners, while the center pavilion terminates in an attic of two stories, and high towering roof, one hundred and seventy feet from the ground. The walls are of granite, and the lower story is on the Doric order of architecture, the second of a modified Ionic style, and the third and fourth of a composite character, surmounted by a modillon ornamental cornice. The whole building will be three hundred and fifty-four feet long, by one hundred and sixty-four feet

wide, and four stories high, exclusive of the attic and roof stories. Beneath is a basement, fourteen feet high, and a sub basement, ten feet high, both furnished with light and air by an area twelve feet wide, running entirely around the building. The interior is most conveniently arranged, and gives accomodation to the Custom House, United States Courts, Internal Revenue and other offices of the Civil Government, besides the Post Office Department

The whole of this beautiful city is very closely and substantially built, the majority of the dwelling houses being situated on the outer streets, the airy suburbs on the surrounding hills, and in the valleys that lie between. New and elegant structures are in daily progress, and improvements are crowding fast upon each other. The Inclined Planes carry the "dwellers upon the hill tops" back and forth as they list, while the street car lines form a curious network all over the city, and the labor of each day adds to her power, wealth and beauty. Her title of "Queen City of the West," is most appropriately bestowed, and right royally she wears it.

COVINGTON AND CINCINNATI SUSPENSION BRIDGE.

This gigantic and ornamental structure, spanning the Ohio river and connecting the two cities of Cincinnati and Covington, was projected in 1856, and brought to final completion in 1867, at a cost of nearly one and a half millions of dollars. As an indispensible adjunct to the convenience and commercial interests of Ohio and Kentucky, and one of the grandest achievements in their history, the Ohio Bridge must ever elicit the admiration and wonder of all who behold it. Constructed of the most substantial material and in strict conformity with the modernized methods of bridge building, its permanency and solidity are well assured—the passage over it of 75,000 pedestrians affords the amplest test. Beginning with an elevation of 62 feet, 6 inches above low water, at the approach near Front street, on the Cincinnati side, it extends 2,252 feet, with an elevation of 71 feet above low water on the Covington side. The height of the flooring above low water in the center of the river span is 122 feet, allowing the unobstructed passage of steamboats and river craft. The flooring of the bridge is composed of a frame-work of wrought iron, on which are laid planks of several thicknesses sustained by suspended wire cables at the distance of every five feet. The roadway is 20 feet wide, containing four iron tracks, each 14 inches in width as an accommodation to different gauges. The total width of the floor between the outside railing is 36 feet.

The continuous elevation of the bridge presents the appearance of a finely formed arch, descending in apparent lines over the approaches on either side. The arch can never loose its beautiful symmetry of curvature, as it is fully sustained and held in proper position by the substantial support afforded by the masonry. The centre is liable to a variation of one foot higher or lower, from atmospheric pressure, but it can not be otherwise affected. The substantiality and durability of the bridge are attributable to the combination of iron girders and suspension cables.

The difficulties heretofore encountered in constructing suspension bridges have been successfully obviated in this structure. The two towers, which greatly enhance the general beauty of workmanship, are very noticeable as well as very useful features. Strict attention was given to the architectural ornamentation of this bridge, as being deemed essential to the tastes and aspirations of a rapidly growing community. The flooring is suspended to two cables. Each cable is formed of 5,180 wires, constituting a cylinder of $12\frac{1}{3}$ diametrical inches. The cable wires are made to occupy positions parallel to each other,

and of relatively undisturbed relations throughout the whole length. The suspenders constitute the connecting links between the cables and the floor. These with only one exception, are made of wire rope, and so constructed as to bear the immense weight of the flooring. The arrangement and general harmony of proportion so admirably conceived and executed render this one of the most splendid specimens of suspension bridges in any country. As contributing to the growing demands of additional facilities for the extension of the commercial relations of the two States and cities, this immense public highway has been found of the greatest possible use and benefit. A very correct idea of the general outlines of the bridge may be obtained from the appended cut.

THE CINCINNATI COMMERCIAL HOSPITAL.

This elegant, commodious and imposing building is located on an extensive plateau north of Twelfth street, between Central Ave. and Plum streets, the dimensions of which are 448 by 340 feet. The grounds are beautifully and tastefully diversified and embellished by shade trees, shrubbery and flowers, while a fountain dispenses its cooling and refreshing showers and lend a healthful and invigorating influence to the surrounding atmosphere when burning with a summer sun. The completion of this immence structure was effected in 1869, at a cost to the city of nearly one million of dollars ; and in point of general attractiveness and accommodation is unequaled by any similar institution in the country. The principal entrance is from the Twelfth street side.

The central portion of the building has a frontage of seventy-five feet with an extension of fifty feet to the rear, with a large hall midway between the wings. On the first floor are the rooms occupied by the Superintendent and his family, and the apothecary and dispensary, pathological museum, reception chambers, and a physicians' library, each occupying well arranged and convenient appartments. In the basement are rooms for storage, and the examining department of drugs, &c. The additional facilities are a laboratory, laundry and drying room, bath rooms, and cellars for various purposes. In the second story are bed rooms for public patients, with a few private apartments designed for the occupancy of those who can afford to pay for them.

In the third story ample provisions are made for operating and lecturing, the immense hall affording seats for seven hundred and fifty students. As an accessory to medical instruction, the hospital contributes available material, and furnishes daily practical exemplification of the various forms of disease, and the course of treatment prescribed by able and experienced physicians. There can be no more laudable and enduring a testimonial of a nation's greatness and claims to civilization and refinement than the founding of institutions for the care and relief of suffering humanity. The aim of all civilized communities should be directed to the amelioration of the condition of their people, and the institution of asylumns for the destitute and diseased. Cincinnati maintains a conspicuous and enviable position in having so magnanimously recognized the demands of her citizens by the construction of so systematic and thorough an institution as the "Commercial Hospital." The accompanying illustration presents a very truthful deliniation of the building, which is built of brick with copings of freestone. The whole structure is covered by a mansard roof of ornamental slate. The dome and spire of the front section attain a height of one hundred and ten feet and add considerably to the general appearance of the stupendous and harmoniously arranged architectural proportion.

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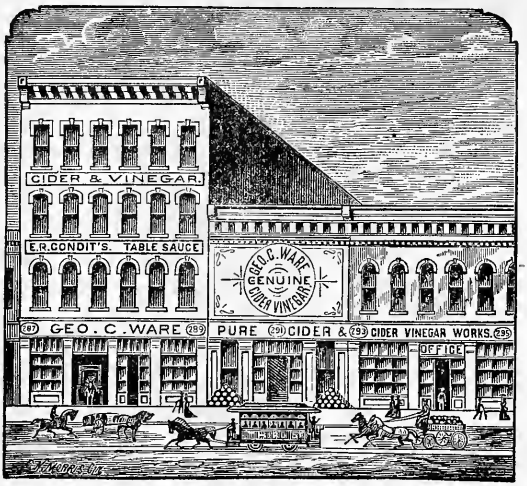

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THE FOUNTAIN.

The Tyler Davidson Fountain, one of the finest works of art in the United States, and the crowning glory of Cincinnati, is situated in the very heart of the city, on Fifth street between Vine and Walnut. It was the munificent gift of Henry Probasco, Esq., as a memorial of his late brother-in-law, Mr. Tyler Davidson, in whose honor it was named. The presentation of this beautiful object had long occupied the thoughts of its originator, but a letter from him, dated at Palermo, Sicily, February 15, 1867, addressed to the Honorable C. F. Wilstach, then Mayor of Cincinnati, contained the first public announcement of the project. The square upon which the Fountain stands was then the site of the old Fifth street Market House, a very useful and time honored institution, the removal of which required no small amount of determination, ingenuity and perseverance, the opposition thereto being most obstinate and protracted. Another important obstacle was the difficulty of finding a suitable design, the usual array of Water Nymphs, Sea Gods, and aquatic birds and beasts, being altogether too antiquated and common-place for this princely undertaking. For this purpose, therefore, Mr. Probasco, visited Munich, and through the kindly assistance of Colonel Ferdinand Von Muller, Director of the Royal Bronze Foundry in Bavaria, he succeeded in obtaining a set of drawings made by August Von Kreling, the son-in-law of Kaulbach, while in the zenith of his fame. They represented the many different uses and blessing of water by most appropriate and beautiful symbols, full of the poetical spirit of the German style. These drawings were peculiarly suited for the purpose, and were faithfully transformed into the graceful and lifelike figures represented in the accompanying engravings, the first of which presents a full view of this noble creation as seen from the east, including the great basin and the four exterior figures adorning the drinking fountains, together with the park and the trees which border either side. The beautiful dark porphyry, of which the heavy circular rim of the great basin and the massive base of the fountain, are formed, was quarried and polished in Weisenstadt, Upper Franconia, while the bronze used in the work was cast from cannon purchased from the Danish Government. The square pedestal is ornamented with four figures in bas-relief, representing four of the principal uses of water; viz.: the Fisheries, embodied by a group of fishermen with their children; Navigation, expressed by a steamboat just embarking, the wharf filled with admiring spectators; Steam, typified by grimy machinists working a trip-hammer which is propelled by an engine and water-power, beautifully illustrated by a number of farmers carrying their corn to a water-mill. Our second engraving is of the great central figure, the Genius of Water, a statue of a majestic female, standing with arms extended, showering from her outstretched hands, a plentiful supply of the blessing for which those below seem entreating. Her face is toward the East, her head inclined forward, and her countenance full of benevolence. This figure is nine feet high, and weighs two tons, each hand weighing ten pounds and containing four hundred and thirty-eight holes through which the water is thrown, two hundred and forty-eight in the palm, twenty-two in the thumb, forty-six in the fore-finger, forty-five in the middle finger, forty-seven in the ring finger, and thirty in the little finger.

Our next engraving presents the eastern front of the upper basin, the figures on which are a mother and child. They are about entering the bath, the child being entirely nude, and the mother partially so, for she modestly holds a garment about her form until she steps into the water. Her face is of the Teuton style of beauty, and full of vivacious life as she gently but firmly guides to the water, the reluctant child, who in pretty wilfulness, winds his little arm about hers and tries to stay her steps, looking coaxingly up into her face while he

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Smut Screens, Grain Screens, Ore Screens, Window Guards, Tree Boxes, Nuts and Washers, Railroad Nut Locks, Bed Keys, Chain Links, &c., always on hand. Gratings, Railings and other metal punched for the Trade at Lowest Rates.

makes his unavailing protest. The modeling of the limbs is exquisite, especially that of the mother's right arm, foot and ankle; the posturing is excellent even the apparent constraint of the mother's left arm is really natural, considering the duty it performs, and the contest she holds with the little rebel.

Turning to the next illustration, we behold a very different scene. The northern front shows the peaceful homestead in danger—the roof on fire and the flames rapidly gaining upon the heroic efforts of the father, whose last supply of water has been despairingly dashed upon them, only to be licked hungrily up by their blazing tongues, which now dart fiercely at him as if possessed by an insatiable thirst that must be quenched with blood if not with water. His only refuge left is prayer, and he stands upon the roof of his dwelling, in fervent supplication to Heaven for the speedy coming of the saving, precious rain. His attitude is admirably expressive of strength and fortitude, self reliant so far as human power can avail, but that failing, has appealed to Him who is "an ever present help in time of need." Heathen philosophy has not so deadened his soul, that he can only fold his arms and smile in bitter derision of the fate which threatens him, or cast himself upon his face and hopelessly await his doom. The fervent face upturned, the brawny arm uplifted, the empty and now useless bucket in his hand, all speak the language of the last great hope on which his heart is stayed.

The central group on the western front, is portrayed in the next engraving of the aged pilgrim seated upon a rock receiving from his daughter a cup of cold sparkling water. His left hand grasps his faithful cane, while his right holds the vessel to his lips as he eagerly quaffs the refreshing draught. The maiden's attitude betrays her kinship to her charge, for never could a hireling or stranger adopt the tender grace of her manner as she bends over the old man, one hand resting on his shoulder, and the other still holding the pitcher which she has filled at the fountain. Her face is said to be in the likeness of Kreling's daughter, but the general character of the conception partakes more of the Oriental, than of the German style. This, however, only illustrates the happy diversity which characterize German art, extending itself into German poetry and forming one of the chief attractions of the works of the immortal Goethe. This group is beautifully expressive of that reverence for age, which is peculiar to the German people, and in which they greatly resemble the Hebrews and Arabians.

Looking upon the Southern group, represented in our next engraving, we again come upon a scene in which the want of water is depicted. The earth is parched by a summer drouth, and the farmer stands beside his idle plow, imploring Heaven for relief. His head is bared in devout reverence, his face uplifted in sad entreaty, while his hand still holds a withering branch from his grape-vine. His dog stands near him with drooping head and lolling tongue. His broad breast and his sinewy legs below the knee are bared, while his whole appearance is that of one weakened and exhausted from intense heat. Still, like his northern brother, he knows where to look for help, and feebly but trustfully turns to Him who "tempers the wind to the shorn lamb."

These four are the principal figures which adorn this unique work, and most ably represent the appropriate and exquisite design of the great master, which show that his fame was justly earned by long and faithful study of his subjects. The eastern and western groups express the blessings of water, while the northern and southern figures vividly portray its use and necessity to all the earth and its inhabitants.

Besides these, the niches of the Fountain are filled with delicate statuettes, formed from drawings by the same artist brain which conceived the others, and which seems to have been imbued with that elegant taste which is displayed in the grand old cathedrals we find in Spain, Italy, France and Bavaria, in which

every niche and corner is converted into a miniature shrine for some saint, by whose image it is occupied. Following this idea, the niches of the Fountain are graced with the figures of innocent and happy children, each subject illustrating some use of water, and some childish way of using it. The niche at the south east corner of the pedestal forms the retreat of a merry little maiden, who sits with her feet crossed on the stones gazing into the water below. In true feminine fashion, she has decked her hair with flowers, and is now twining a necklace of beads about her throat. Her position is charmingly graceful, while her face is full of innocent delight as she contemplates the pretty reflection in the water.

In the niche on the north-east corner, sits a bold handsome fisher boy, he has caught a lobster in his net, and holds it up to view in childish triumph. The lobster is distinctly fashioned, while the figure of the boy is full of power and spirit. He is entirely naked except for the net which forms a happy drapery and his childish limbs are beautifully rounded.

The niche on the north-west corner is the shrine of a little girl holding a sea-shell to her ear. Her dainty form, lovely face, and charming attitude, full of infantile wonder and joy as she eagerly listens to the "song of the shell," combine to render this figure the most poetical and beautiful of all. No mother can see it and not fall in love with the little conchologist.

On the south-west corner, the niche contains a sturdy boy, wrapped in furs and busily engaged in strapping on his skates. The right foot is satisfactorily prepared, but there is trouble with the left, and he has it crossed upon his knee as he patiently tightens the buckles. His face is as grave and earnest as if it were a matter of life and death, but let him be once equipped, and the glittering ice will know no swifter foot or merrier heart.

The next four engravings represent the four bronze drinking fountains stationed upon the outside rim of the great basin, and which form a most grateful convenience to the thirsty passers by. The design for these was furnished by Colonel Von Muller, in addition to that of Kreling's. The first represents a youth seated upon a dolphin, through the mouth of which flows the clear water. The youth is most symmetrically modeled, and admirably portrays strength in repose. This figure embellishes the south-east corner, while the opposite point is adorned with a youth in a kneeling position holding in his right arm a struggling duck, and with his left hand grasping another by the neck, from whose open bill flows the limpid stream.

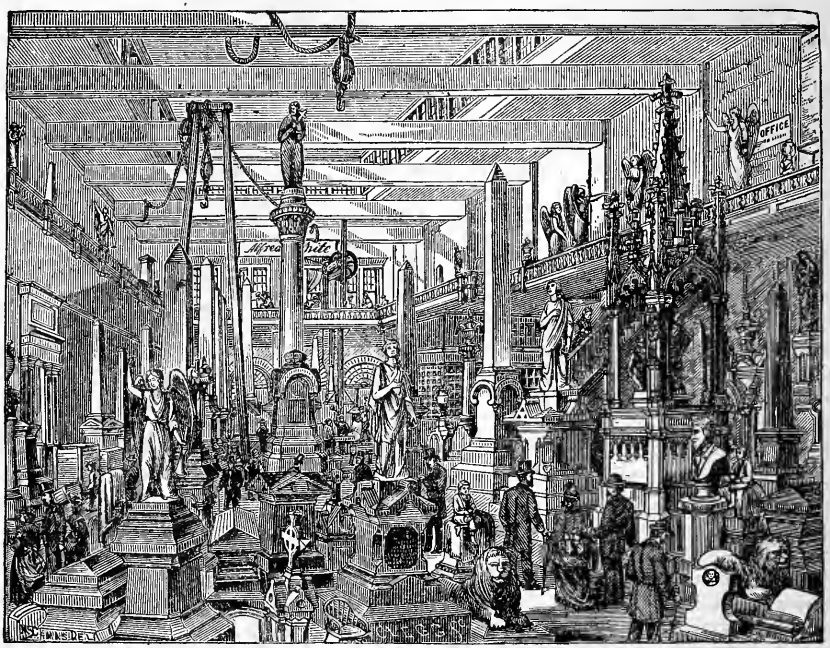
Upon the south-west corner is another youth, in combat with a snake which has twisted itself about his right leg. Seizing it firmly with his right hand, he draws back his left, in which he holds a stone with which to destroy the reptile. His form is the embodiment of muscular strength, and his face expresses determination and courage. In the meantime, however, the snake reverses its character, and instead of a curse become a benefactor to mankind, and pours forth its quota of the fresh sparkling liquid.

On the north-west corner still another youth appears. He is sitting on a tortoise, which also forms an involuntary contributor of the blessed fluid. This piece of sculpture, like its opposite, is full of life and power, and exquisitely portrays the action of those which are brought into play.

These four figures prove the fidelity with which Colonel Von Muller has studied the original design, and the care with which he has followed its idea in every detail. He superintended the erection of the fountain in 1871, and gave the necessary, careful and explicit instructions regarding the manner of cleaning the bronze and the tubes, and directions for turning off the water at the proper temperature. When the Exposition was in progress the water was sometimes turned off from the fountain in order to insure a full supply on Elm street in case of fire. On the 6th of October, 1871, in the presence of an immense

Alfred White,

IMPORTER OF



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CINCINNATI, O.

The finest and Cheapest place in the United States to buy.

multitude of visitors and citizens, the Fountain was unveiled with appropriate music and ceremonies. In its history, the following statistics of its dimensions and cost were given. The esplanade or park is four hundred feet long and sixty feet wide, its price was seventy-five thousand dollars, which was paid by the city. The height of the Fountain is thirty-eight feet above the esplanade; the outer diameter of the great basin is forty-three feet, the inner, thirty-eight feet. The weight of the porphyry used in the base and basin, is eighty-five tons, and that of the bronze in the fountain, twenty-four tons. A subterranean apartment, twelve feet deep and ten feet square forms the cooling chamber for the water of the drinking fountains. Its walls are covered by two thousand feet of pipe, and the chamber is filled, at intervals, with ice. The total cost of the Fountain was one hundred and five thousand dollars.

THE PUBLIC LIBRARY.

The projection and successful establishment of this great "Literary Repository," may well be regarded as one of the most laudable in Cincinnati's record of achievements. This elegant, commodious and systematic institution, designed to contribute useful and instructive reading facilities to the public, has, within the past decade, attained its present high standard and enviable position among the great libraries of the country. In 1844 the Public Schools of the city possessed a miscellaneous assortment of books, which were so promiscuously placed as to require much time in collecting. This was, however, effected in 1855; and in the year following a union with the Mechanics' Institute was arranged and the collection delivered into the custody of that body. During this year, 1856, a legislative enactment, providing for the levy and collection of one-tenth of a mill for the sustenance of public libraries, was promulgated : a measure eventually necessitating more extensive accommodation; in September 1868, the property now occupied by this institution, and on which a building for another purpose was then in process of erection, was bought for $86,910. The dimensions of this lot are 80 feet front, extending 190 feet back from Vine to College street. The cost of the building to the 26th of February, 1874, when admission to the public was granted, was $296,684.53. To include expenditures for actual requisites since, would sum up totally over $400,000. The affairs of the Library are regulated and controlled by a committee of seven delegated from the Board of Education. In exterior beauty, the Public Library will compare with any in America, while its interior arrangement is a model of accuracy and neatness. To the left, as you enter, is the Librarian's office, the office of the Superintendent of Public Instruction being on the right. The Delivery Room where the books are dealt out to applicants from 8 A. M. to 10 P. M., daily, is a spacious apartment with tesselated marble flooring, containing delivery counters and comfortable seats. A handsome stairway conducts you to the reading and consulting room (see descriptive cut) which is free to all well behaved persons, who may occupy their time in reading and study during prescribed hours. Above are the niches for the books, the room devoted to art, the binding department, &c. The number of volumes on hand to the end of February, 1878, was 95,215; the number of pamphlets, 10,892. The usage of books and periodicals during the year 1876, including the first two months of 1877, amounted to 196,871 ; in 1877, including the months of January and February 1878, to 220,112—a gain of 23,241. Constant additions of careful selections are being made; and the design and aim of this estimable enterprise will have been reached to the

CINCINNATI GYMNASIUM.

honor and pride of the people of Cincinnati. The capacity of the Library is 300,000 volumes. Presuming upon present statistics, a few years will supply the deficit, and render the "Public Library of Cincinnati," equal to, if not larger than any in the country.

THE CINCINNATI MUSIC HALL.

The magnificent conception by which Cincinnati will obtain the most splendid Music Hall in the country, was engendered by the popular musical festivals of 1873, and 1875. Mr. Reuben R. Springer, the projector with his characteristic and noble generosity and public-spirited enterprise submitted to Mr. John Shillito a proposition of conditional import for the purpose of erecting a suitable building to be devoted to musical and exposition purposes, in which he agreed to contribute $125,000, provided a similar amount would be subscribed by the citizens. Mr. Springer enjoined, as one of the stipulations of his proposition, that the lot on Elm, corner of Fourteenth Street, be obtained from the city for a moderate rental and free from taxation, for the continued accommodation of an incorporated association.

The enthusiastic recognition of this movement resulted in the speedy delegation of subscription committees by the Chamber of Commerce, Board of Trade, Ohio Mechanics' Institute and Cincinnati Musical Festival Association. The exposition feature, however, being by some of the interested parties deemed subservient to the interests of the Music Hall, induced loud complaints and decided objections. Pending this unfortunate agitation of the question, subscriptions were but tardily received. The difficulty was, through the munificence of Mr. Springer successfully obviated, he making an additional proffer of $50,000 to be paid as soon as $125,000 was raised by the citizens—inspiring renewed hope and exertion, and the prosecution of the plan was assiduously conducted. A report of the Committee placing $106,031, at the disposal of the Association, preparations for the building were instituted. A Convocation of the subscribers resulted in their assembling in College Hall, December 1st, 1875, and December 8th, pursuant to the understanding of the Committee, the Cincinnati Music Hall Association was incorporated with a capital fund of $1,000, apportioned in divisions of $20, to be controlled by the stockholders appointed by the subscribers. The draft of incorporation was made, and on the 18th of December, ratified by the signatures of Reuben R. Springer, John Shillito, Joseph Longworth, Josiah Kirby, Robert Mitchell, Alfred Gaither, and others, and submitted to the Secretary of State.

Regarding the use of the Hall, the exactions are "For musical festivals, expositions of art and industry, fairs, conventions or public meetings, and such other entertainments as may not be prohibited by law, and as in the judgment of the Trustees may not be improper to be held in such Hall, &c." After the inspection and refusal of the designs of various contesting architects, the matter was adjusted by the adoption of those of Messrs Hannaford and Procter, of this city, September 9th, 1876. An accurate idea of this elegant design is handsomely conveyed by the subjoined illustration.

In order to finish the building in time for the musical festival in May, 1878, active measures were adopted, and the progress has been rapid and satisfactory. The mildness of the past winter has greatly facilitated the undertaking, and the building is well advanced—the roofing and slating being well-nigh completed. It is fair to presume that the next musical festival will be held in the Hall, as it will be ready for occupancy, if not wholly completed by that time.

The beautiful and imposing character, of this stupendous edifice accords it a high position of architectural merit. The Gothic order somewhat improved from the old standard, lends it an artistic and charming effect. The material used is a pressed brick of fine finish and fresh appearance, substantially laid, with ornamental tiling of variegated coloring. The harmonious arrangement of a succession of buildings is happily conceived, and greatly conduces to its attractiveness. The entire frontage on Elm street, occupies 372 feet, 4 inches. The extent of the building, from Elm to Plum street, is 293 feet. The greatest elevation is the pinnacle of the front gable, which reaches an altitude of 150 feet. The north building will be devoted to exhibitions of machinery. There will be three art galleries in the third stories, arranged after the order of the South Kensington Museum. The south building, of dimensions similar to the north building, will consist of only two stories, with a third story on the east. The two buildings are computed to cost $144,800. The Music Hall proper will occupy the central position.

Stone steps will afford approach to a stone platform of twelve feet in width, running the whole extent of the front with the exception of the space occupied by the towers. There will be five entrances intervening and affording ingress to the grand hall, which comprises 46 by 112 feet, with an elevation of 41 feet, intercepted by a balcony extending around it. The main hall will be 112 feet broad by 192 feet long. The auditorium will be allowed 112 by 56 feet, including 50 by 30 feet which will be occupied by the organ. This immense platform, it is said, will afford accommodation for 560 singers and a moderate sized orchestra. Extending along the sides of the main hall there will be corridors eighteen feet wide. Stairways of stone and iron, at convenient points will lead to and from the corridors. Paneling of tulip wood will be used for the walls and ceiling of the concert hall.

The Grand Organ, one of the most splendid in the world, will be placed at the rear of the auditorium. The total number of stops in the organ will be 94, with 6,189 pipes and twelve pedals. The organ was built by Messrs. E. and G. G. Hook & Hastings of Boston. Its supposed cost will reach $30,000, Mr. Springer contributed to this separate feature $5,000. Through the philanthropic projection and princely endowment of Mr. Springer, and the dilligent co-operation of the people of Cincinnati, this commendable and highly honorable achievement will ever serve as a fitting reward for their zealous efforts, as being the pride of the city and the admiration of the world.

THE CINCINNATI FIRE DEPARTMENT.

As an institution of acknowledged efficiency and superior management, the Cincinnati Fire Department has ever maintained a high standard, and to-day ranks second to none in the country. As an important branch of municipal government in affording protection to life and property, too much attention can not be given this necessary adjunct, and popular demand has been fully met in the judicious and well regulated administration of this department in Cincinnati. The accompanying illustration portrays with all the force and sublimity of the weird and picturesque scene the circumstances attendant upon a night alarm. The velocity with which the fire engine is transported to the scene of the conflageration by the flying steeds who seemingly evince by their maddening speed the necessity of haste; while the eager crowd in motley groups assemble and hurry along in the direction of the burning building, form very striking representations. The solemn tolling of the bells and the cries of "fire," in commingled sounds arouse the sleeping city, and anxious hearts are beating with a

Albion Hotel,

179 ELM STREET,

(Bet. 4th and 5th.)

CINCINNATI, O.

ON THE

American & European Plan.

J. S. & A. C. GOLDTRAP,

Proprietors.

New building, centrally located, accessible to places of Amusement. Street Cars passing the door. A delightfully cool Hotel. Guests are shown every attention.

RATES, ONLY $1.50 PER DAY.

Atlantic Garden.

This delightful Restaurant and Beer Garden is located at

245 VINE STREET,

WHERE CAN ALWAYS BE FOUND

Fresh Cool Lager Beer,

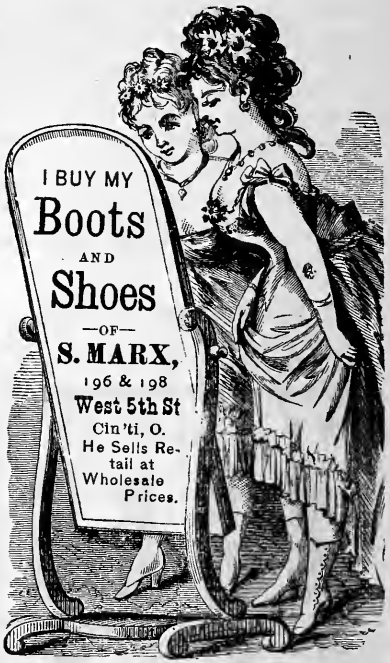
CHOICE WINES & CIGARS, AND

A TABLE FOR THE GODS.

Visitors will find no pa ns spared to add to their comfort in the Eating and Drinking line.

FRED. ROOS,

Proprietor.



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To Land Buyers, a FREE RIDE over land grant roads.

I am the only agent east of the Mississippi river acting under appointment received from Governors of Western States. My duties are to see that you get reliable information and the best possible rates on transportation.

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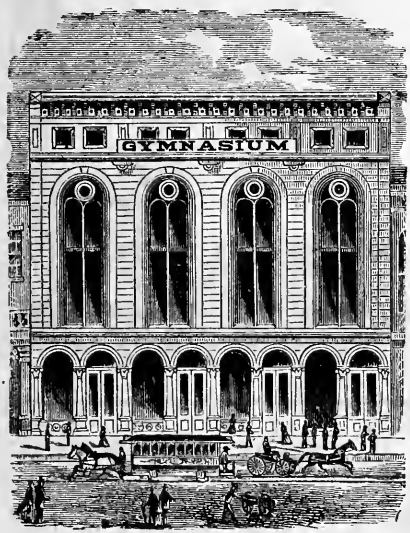
nameless dread—but confidence and hope resume their sway when morning heralds proclaim that no lives are lost and but little damage been sustained by the property owner; and this is due to the prompt and gallant conduct of the fire department. How must the hearts of the brave defenders of the lives and property of the citizens swell with the proud reflection of having been instrumental in staying the hand of the demon—Fire!

THE CINCINNATI GYMNASIUM.



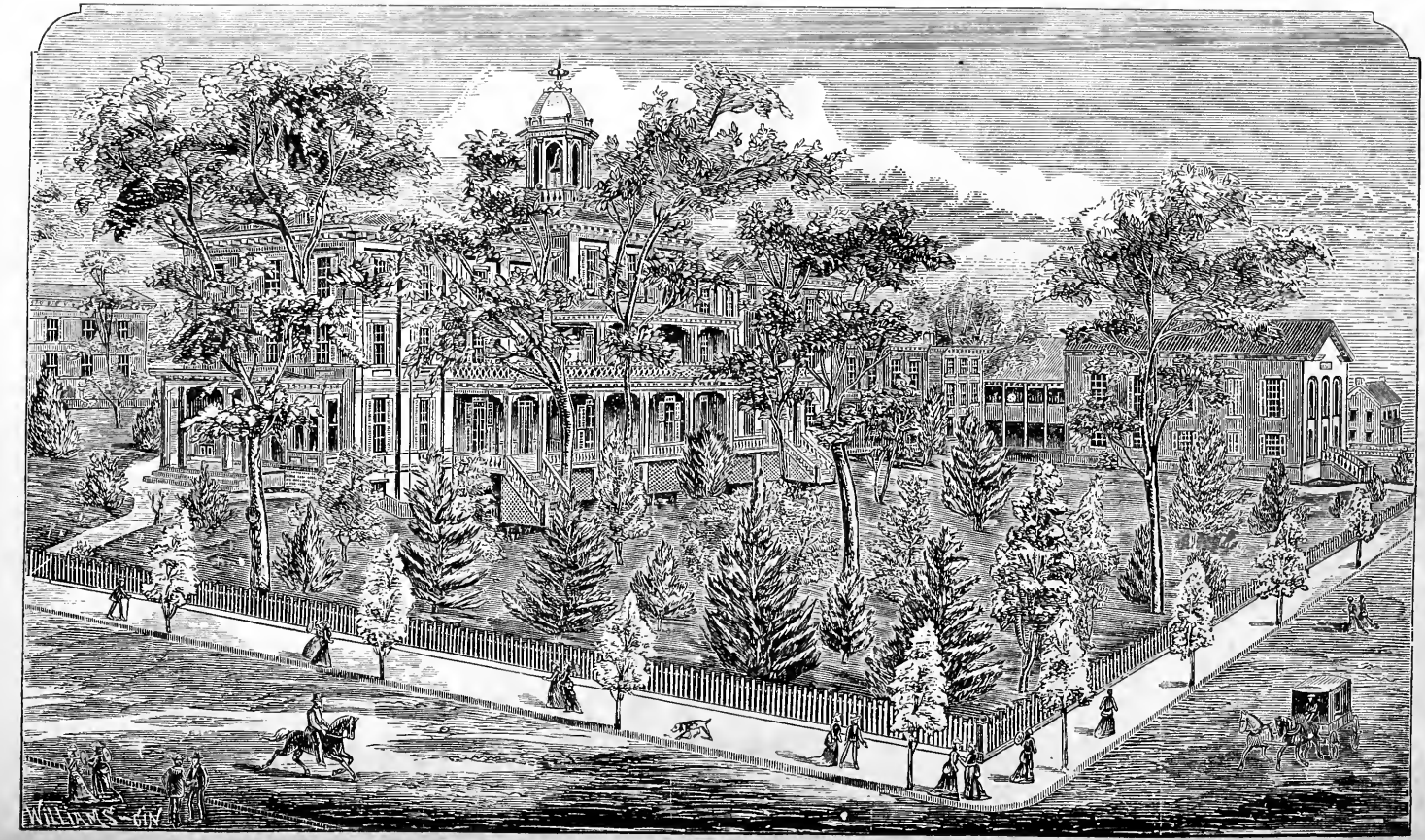
This beautiful building, constructed of light freestone in graceful design, occupies a front of seventy feet wide on Fourth between Vine and Race streets. The interior is handsomely and tastefully arranged and provided with all the necessary appurtenances to physical exercise and culture. The main exercising hall is a commodious and splendid apartment in the second story, one hundred and twenty feet long, forty-five feet wide, and thirty-eight feet high, well lighted and properly ventilated, and containing every requisite for the convenience and comfort of the members. As a medium of recreation and pleasure from the restraints, cares and confinement of business and labor, while obviating the serious consequences to health attendant upon sedentary occupation and habit, a great *desideratum* has been attained. The commendable and thoroughly systematic institution embraces all the essentials of a school for the exercise, training and development of the physical organism, and as such is well worthy the support and encouragement of the public. The accompanying illustrations convey a very correct and adequate idea of both the front and interior arrangements. As one of the prominent features of the "Queen City," the Gymnasium is well deserving of notice, and visitors to the city should not fail to inspect it.

THE NEW POST OFFICE AND CUSTOM HOUSE.

To meet the exactions of an increase of postal and custom-house business, an elegant and commodious building is now being erected—the exterior view of which is truthfully presented in the accompanying illustration. Work on this building was commenced in April, 1874, and it will be prosecuted as rapidly as Congressional appropriations will allow. The estimated cost is $4,000,000, and three years more will be required for its completion. The ground on which the building will be located embraces a frontage on Fifth street, from Walnut to Main, of 361½ feet, extending back 167 10-12 feet to Patterson alley. The design, of beautiful conception, embodies a happy blending of the Doric and Ionic orders of architecture, which will result, in its execution, in a triumph of the art.

The foundation and sub-basement will be of solid limestone; the basement

GLENDALE FEMALE COLLEGE.



FOR ADVERTISEMENT AND NOTICE, SEE NEXT PAGE

and pedestals of the first story of red granite from Missouri; and the superstructure of gray granite from Main. Cement will be used in laying the brick work. An area of from 8 to 11 feet wide will enclose the building, and furnish ventelation and light to the lower rooms; while above the first story, the interior space will be an open area—an exceptional and hitherto unknon feature in the construction of buildings here. The first story, including a basement of 15 4 12 feet, will have an altitude of 27 3-12 feet; the second story, 22 3-12 feet. The entire walls will be supported by iron girders and columns. The building will comprise five stories and two basements, and will afford ample and convenient accommodation for the transaction of all business appertaining to the custom-house and post office departments. The addition of this magnificent building requsite to the extenson and growth of Cincinnati, will abundantly attest the enterprise of her citizens, and the predominant and laudable inclination of contributing to the many objects of attraction so conspicuously characteristic of the city. The old post office building (now in use,) at the south-west corner of Fourth and Vine streets, is correctly represented in the appended cut.

ZOOLOGICAL GARDEN OF CINCINNATI.

This institution which was first opened to the public in September, 1875, has now become one of the great, if not the greatest features of the city. Hundreds visit it daily, and all express their astonishment at its wonderous beauties and progress. There are some sixty-six acres devoted "to the establishment and maintenance of a Zoological Garden, at Cincinnati, and the study and dissemination of a knowledge of the nature and habits of the creatures of the animal kingdom" as was set forth for its object when first proposed in July, 1873. Its projectors were Messrs. Andrew Erkenbrecker, John Simpkinson, C. Oskamp, and George H. Knight. There is now a Board of Directors, with a President, Vice President, Treasurer, and Secretary, who meet the first Monday in each month. At present the Board is composed of Mr. John Simpkinson, Cornelius M. Erkenbrecker, Carl A. G. Adae, George Ficher, James M. Doherty, F. Marmet, Henry Mulhauser, Albert Fischer, and O. Laist. Mr. John Simpkinson is President; Carl A. G. Adae, Vice President; Cornelius M. Erkenbrecker, Treasurer, and Frank J. Thompson, Secretary. There is also an Executive Committee, of C. M. Erkenbrecker, Chairman, F. Marmet and George Fisher, with the President and Vice President, as *ex-officio* members, who meet weekly to look after the interests of this world-famed resort.

Nearly $400,000 are now invested in this Zoological Garden, and it is a strictly private enterprise, not indebted one cent to any municipal body or in any way dependent upon such. This certainly speaks volumes for those who have so liberally contributed their time and means to an institution that is of the greatest benefit imaginable to the citizens of Cincinnati. There are but two other Zoological Gardens in this country; one at Philadelphia, and a small one at St. Louis, but in no way can they be compared to this one, belonging to and the offspring of a few liberal citizens of the "Paris of America." So famous has this Garden become, that it has received recognition from the crowned heads of Europe.

The Garden has several fine buildings, prominent among which the carnivora, a long stone building, admirably adapted, and with rows of cages each side and summer quarters on the north side for lions, tigers, leopards, pumas, hyenas, cougars and others of the cat species. This building is thronged daily with visitors observing the numerous animals. They are fed daily at 3 o'clock p. m., when ensues a scene that beggars description. Another fine building is the

Monkey House, in which nearly a hundred specimens, from the huge mandril to the small marmoset, can be seen, playing their tricks to the great delight of visitors. A cluster of buildings are known as the Aviaries, in which most beautiful birds and fowls from every clime can be seen, together with a number of reptiles in a large reptile house. The ominous rattle of the rattlesnake greets you as you enter this house, but they are in glass cases, and consequently are powerless to harm. The Bear Pits are the finest in the world, and contain specimens of the polar, grizzly, black and cinnamon bear. The sea lion basin is another of the fine structures on the ground, with three occupants, caught thousands of miles away especially for the Garden. The deer and elk parks, camel enclosure, ostrich run and dozens of other places devoted to some representative species are here to be seen.

The restaurant, a massive stone building, handsomely built, is a great resort for thousands. From several points a good view of the grounds are obtained, and with music as an adjunct, an entire day can be spent profitably, viewing the wonders of this garden, which is open to the public daily at a nominal admission fee, throughout the entire year.

Great praise is due the President, Mr. John Simpkinson, for his untiring zeal and devotion to the interests of the Garden, while the Directors as co-laborers merit notice. The Superintendent of the Garden is Judge H. P. Ingalls, with Frank J. Thompson as assistant, two gentlemen well fitted for their difficult and arduous positions. Mr. W. Lewis Gilbert, is the business manager. In conclusion we would say that every person who visits Cincinnati should go to the Zoological Garden.

PIKE'S OPERA HOUSE.

This superb and splendid structure, devoted to art and theatrical exhibitions, occupies the site of a building of the same name which was consumed by fire March 22, 1866. It is justly regarded as being superior to any other place of public amusement in the city, and for general adaptability to its purpose has but few equals in the country. Possessing exteriorly one of the handsomest and most elegant fronts on Fourth street—the main thoroughfare of the large and populous city of Cincinnati—it has been a subject of much laudatory comment; while its interior arrangement is probably the grandest and most artistic in the United States. The stage comprises 45 by 72 feet. The proscenium is a marvel of tasteful and ornate embellishment.

The frescoing of delicate tint and masterly execution, contributes to the general harmonious and picturesque decoration. The marbeling process is employed throughout the interior, and lends an indefinable charm to the beauty of brilliant effects. The many and attractive emblematical figures greatly enhance the grand order of decorative embellishment and diffuse the luxurious and magnificent conceptions of design. The symbols of music and poetry are embodied in graceful and symmetrical female figures placed over the central portion of the balcony. The various representations of the histrionic art are illustrated by elegant and appropriate designs.

Tragedy is represented by a figure in purple vesture, pointing a dagger held in one hand at a mask in the other. To the right is placed Comedy in festive costume; while Music in sombre robes takes position to the left. Poetry and Agriculture are beautifully represented; while Sculpture, Painting and Architecture have appropriate symbols and positions. The heads of Shakespeare, Homer, Bellini, Verdi, Meyerbeer, Paganini, Donizetti and Mozart are pictured in medallions. The whole interior arrangement is gorgeous and higly emblematic of art, poetry and music. The seating capacity of the house is over 2,000, though more than 3,000 were on one occasion accommodated.

THE
Cincinnati Gazette.

ESTABLISHED 1793.

The CINCINNATI GAZETTE has been in existence eighty-five years, and its growth aptly illustrates the general growth of American journalism, for no paper of equal age has attained a similar circulation and celebrity. The City of Cincinnati is notably superior in its intelligence, and exacting in newspaper requirements, while the contiguous country upon all sides is thickly populated.

As a complete American newspaper, the CINCINNATI GAZETTE has no superior. Its ability and its integrity are recognized and unquestioned. It has a national reputation for its fearlessness, no less than for its fairness in the discussion of matters of political and public policy.

The weekly edition of the GAZETTE is one of the most widely-circulated family and agricultural papers. Its agricultural value is seen in its abundant correspondence from practical farmers, who make it their medium for the exchange of views and intelligence. Of literature it is not unmindful. It has more than 3,000 regular club agents, and is sent to subscribers at over 4,000 post-offices throughout the land.

FACTS FOR ADVERTISERS.

NEWSPAPER CIRCULATION.

The amount paid for postage by four Cincinnati newspapers, for the fiscal year ending June 30, 1877, is as follows:

	No. of Lbs.	Amount Paid.
Cincinnati Gazette	**233,524**	**$4,650 48**
Cincinnati Enquirer	198,532	3,970 64
Cincinnati Times	154,908	3,098 16
Cincinnati Commercial	90,647	1,812 94

Terms of Weekly Gazette.

Single copy, one year,	Postage Paid	$1 50
Clubs of 3 copies and upward,	"	each, 1 40
" 40 "	"	" 1 35
" 60 "	"	" 1 25
" 75 "	"	" 1 20

Terms of Semi-Weekly Gazette.

Single copy, one year,	Postage paid	$3 25
Clubs of 3 copies and upward,	"	each, 2 90
" 15 "	"	" 2 80

Terms of Daily Gazette.

Single copy, one year,	Postage paid	$12 00
" 6 months,	"	6 00
" 3 "	"	3 00
" 1 "	"	1 25

Additions may be made to Clubs, at club rates, any time during the year, through our Agents. EVERY POSTMASTER IS AGENT FOR THE GAZETTE.

CINCINNATI GAZETTE CO.

CINCINNATI BUSINESS DIRECTORY

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FRESHMAN, E. N. & BROS., Newspaper Advertising Agents, 186 west Fourth street,

ARTIST.

HEROLD, M. Artist of Penmanship, Diplomas, Certificates, Testimonials, &c., &c., Engrossed in the best manner. 166 Central Ave.

AUCTIONEERS.

BLINN, JAMES, Auctioneer. Sale days.—Tuesdays and Fridays. 153 W. Fifth street.

JOHNSON & CO., General Auctioneers and Commission Merchants, 20 E. Fourth street.

AWNINGS, TENTS, &c.,

RYLING, JOHN, Manufacturer of Awnings, Tents, Flags, Window Shades, &c., 22 East Eighth street.

AXLE GREASE.

LONGLEY, GARLICK & CO., Dealers in Axle Grease, 49 & 51 w. Front st. See Advertisement.

BAKERS & CONFECTIONERS.

PERKINS, JOHN J. & CO., Wholesale Bakery and Confectionery, 43 Vine street. See advertisement.

MUTH, A. E. & H., Bakery and Confectionery, 337 Central Avenue.

SCHELLENBERGER, JOSEPH, Bakery and Confectionery, 208 W. Court street.

BAKERS CRACKERS.

FOERSTER, D. Cracker Baker, 94 west Second street. See Advertisment.

SNIDER, BROTHER & CO., Manufacturers of Crackers and Biscuits, 131 and 133 W. Front street.

BAKING POWDER.

BISHOPRICKS Infallible Baking Powder, 111 w. 5th. Wm. H. Haworth, Proprietor.

BARBER.

DIXON, JOHN Fashionable Barber and Hair Dresser, 6 east Second street

BEDSTEADS, LOUNGES, &c.

HUNT STREET BEDSTEAD MANUFACTURING CO., Bedsteads a specialty, 116, 118, 126 and 128, Hunt street.

BEER COOLERS AND FAUCETS.

SCHMELZER, JOHN, Patentee and Manufacturer of the Champion Beer Coolers, 47 and 49 W. Canal street.

VARWIG, H. Manufacturer and Patentee of the Self Venting Beer Faucet, Brewers' Patent draw Cock, 421 and 423 W. Court street.

BELTING AND HOSE.

SHARP, JOSEPH, Belting Hose, &c., 59 Walnut street. See advertisement.

Billiard Table Manufacturers.

PETER, THEODORE, Billiard Tables repaired and cut to smaller sizes, N. E. corner Elm and Canal streets.

THE J. M. BRUNSWICK & BLAKE CO., Manufacturers, 8, 10 and 12 W. Sixth street.

BITTER MANUFACTURERS.

MEYER, LEOPOLD, Manufacturer of Kemper's Stomach Bitters, 403 West Eighth street. See advertisement.

BLANK BOOK BINDERS.

RICHTER, H. F., Blank Book Binder, 17 West Eighth street. See advertisement.

BLEACHERS.

TABER, J. C., Mnfr of Plaster Hat & Bonnet Blocks, Also Bleacher & Finisher of Straw Hats & Bonnets, 241 w. Fifth st.

BOOK KEEPER.

KOESTER, CHARLES, Book Keeper, 679 Vine street.

BOOKS AND STATIONERY.

BENZIGER BROTHERS, Publishers, Booksellers and Importers of Church Ornaments, 143 Main street.

HEROLD, M. & SONS, Antiquarian Book and Methodist Book Store, No. 166 Central Ave, below Fifth.

PERRY & MORTON, Booksellers & Stationers, Periodicals, &c. 162 Vine street.

POUNSFORD, A. H. & CO, Booksellers and Stationers, 9 and 11 W. Fourth street.

PUSTET, FR., Church Publications and Religious Articles, 204 Vine street.

THOMPSON, PETER G., Bookseller, Stationer, Importer, Printer and Binder, 179 Vine street.

WARREN, ALFRED, Bookseller and Stationer, 219 Central Avenue and 271 West Sixth street.

BOOTS & SHOES.

ALTER, PINCKARD & CO., Wholesale Boots and Shoes, 99 West Pearl street.

BENCKENSTEIN, JULIUS, Wholesale Dealer in Boots and Shoes, 94 West Pearl street.

CATELLIER, D. & CO., Manfrs womens' misses' and childrens' Shoes, 20 w Pearl st

DETERS, JOHN H., Manufacturer of Ladies' Fine Shoes, 95 Pearl street. See advertisement.

EGAN, MIDDEKE & CO, Wholesale Commission dealers in Boots, Shoes & Brogans, 16 west Pearl street

BOOTS & SHOES (Continued.)

GIESTING, G. Manfr & Dealer in Ladies', Gents' & Childrens, Boots & Shoes, 52 w 5.

HAWES & DURRELL, Manfrs & Com. Merchants, in Boots & Shoes, 26 w Pearl st.

MAHONY, JERRY, Manufacturer of Ladies', Misses' and Childrens' Fine Custom Shoes, 140 Central Avenue.

MC KIERNAN, M. & SONS, Wholesale Boot and Shoe Manufacturers, 90 Main street.

MARX, S., Dealer in Boots & Shoes, 196 & 198 w. Fifth st. See Advertisement.

MEYER, ADOLPH & CO., Commission Merchants, Manufacturers and Jobbers of Boots and Shoes, 83 and 85 West Third street.

SMITH, STOUGHTON & PAYNE, Manufacturers of Boots and Shoes, Nos. 23, 25 and 27 Lock street. Office, 81 West Third street.

STRAUS, M., Manufacturer and wholesale dealer in Boots and Shoes, 436 Main street.

THORNE, W. F. & CO., Manufacturers and Wholesale dealers in Boots and Shoes, 79 West Pearl street.

BOTTLERS & BREWERS.

WALKER, J. & CO. Brewers & Bottlers of Ale and Porter, 385 Syeamore. See advertisement.

WESTERN BOTTLING CO. Charles Benzer, Proprietor. Bottlers of Lager Beer, 731 Central Ave.

BRASS FOUNDERS.

KIRKUP, ROBERT & CO. Brass Founders & Mnfrs. Lift, Force & Air Pumps, 65 Lodge street.

NOTTINGHAM, T. J. & Co., Mnfrs. of Brass Goods, Iron Pipe and Fittings and general supplies, 212 West 2nd street.

POWELL, WM. & CO., Union Brass Works, 245, 247 and 249 w. Fifth street. See advertisement.

BREWERY.

FOSS & SCHNEIDER, Queen City Brewery, 259, 261, 263, 265 and 267 Freeman street. See Advertisement.

WEBER, GEORGE, Jackson Brewery, 284 Hamilton Road.

BROKERS.

LEA, STERRETT & CO., Brokers. 28 west Third street. See Advertisement.

BRUSHES.

BROMWELL MANF. CO., Manufacturers of Brushes and Wire Goods, 181 Walnut st. See Advertisement.

BURIAL CASES.

AMERICAN BURIAL CASE CO, Manfrs. Patent Self-sealing Air-tight Burial Cases and Caskets, 82 & 84 Second street

BUTCHERS MELTING ASSOCIATION.

NICOLAY, HY., Supt. cor. Central Ave and Findlay street.

CABINET HARDWARE.

WAYNE, J. L. Jr., Agt. Cabinet Hardware in all its varieties. 140 and 142 Main St.

CANNED GOODS.

DENHAM, R. M. & Co., 44 Public Landing. See Advertisement.

CARPETS.

AVERY, S. B. Manager Falls of Schuylkill Carpet Mills, 107 w Fourth street.

HASELBURG & Co., Carpets, Oil Cloths and Window Shades at Wholesale and Retail. 185, & 187 west Fifth street

OTTE, GEO. F. & Co., Carpet Dealers, 133 west Fourth street.

THOMS, L. B. & Co., Dealers in Carpets and Oil Cloths, 173 and 175 Main street.

CARRIAGES.

ANDERSON, HARRIS & Co., Buggies & Carriages, n. e. cor. Liberty and Baymiller streets.

AUEL, JOHN, Carriage and Wagon Mfgr. Orders promptly attended to, 701 703 Central Ave.

AUFDERHEIDE, WM. & Co., Mnfrs. of Carriages, Spring Wagons &c., 422 and 424 Freeman street.

BENTLEY & MARQUA, Mnfrs of Childrens Carriages, 139 Longworth street.

BRUCE, B. & Co. Manufacturers of Carriages, 57, 59 & 61 Elm and 161 & 163 w Second sts.

CURRY, J. A., Carriage Manufacturer for Dealers and Traders, s. w. cor. Florence and Denman streets. See advertisement.

EMERSON, FISHER & Co., Carriage Manufacturers cor. John and Findlay streets.

GILDEA, W. W., Manufacturer of Carriages, 524 w. Eighth street.

HEISEL, NIC, Jr., Manufacturer of all kinds of Carriages, Spring Wagons, &c. 11, 13, and 15 w. Liberty street.

KLOPP, PHILIP, Manmfacturer of Platform Spring Furniture, 561 and 567 Race street. See Advertisement.

KUCKMEYER, J. W., Buggy and Spring Wagon Manufactory, 193 and 193 Findlay street, bet John and Linn.

MILLER, D. W. & Co., Wholesale Carriage Manufacturers, cor. St. Clair and Gano streets. See Advertisement.

MILLER, GEO. C. & SONS, Carriage Manufacturers, 19 and 21 w. Seventh St.

NIEMANN & MOORMANN, Carriage and Spring Wagon Manufacturers, 373 Race street.

ROBERTS, J., Manufacturer of Carriages. Repairing promptly done, 132 and 34 w. Sixth street.

ROTH, G. W., Carriage Manufacturer, 532 John street.

SCHNEIDER, DANIEL, Carriage and Spring Wagon Manufacture , 630 w. ixth street.

SIMMONDS, G. T., Prop ietor John St. Carriage Factory, 455 and 485 John street.

SKAATS, J. K., Carriage Manufacture n.e, cor. Eighth and Syeamore.

WEBB, W. H. & Co., Mnfrs. of arriages, Spring-wagons Buggies 199 w. 7th street.

WENDE, HERMANN, Carriage Maker, .w. cor. Cutter and Melancthon streets.

WILTS & HESS, Manufacturers of Carriages 91 and 93 Canal street.

ZINSMEISTER, JACOB, Mnfr. of all kinds Carriages, Spring-wagons and Buggies, 553 John street. See Advert sement.

CEMENT, FIRE BRICK, DRAIN PIPE, &C.,

NICOLAI, JOHN V., Dealer in Cement, Plaster, Lime, Fire Brick, Drain Pipe, Patent Chimneys, Chimney TopsRoofing Tile &c.

CHAIRS.

BUCK & Co., Mnfrs. of Cane Seat Chairs, 242 and 244 Sycamore street.

HATKE, G. & H., Mnfrs & Dealers in all kinds of Chairs, cor. Oehler & Dalton Ave.

HENSHAW, G. & SONS, Mnfr. of Chairs, s.w cor. Elm and Canal streets.

PUTTMANN & ROBERS, Mnfrs Steam bent and sawed Chair backs and Cigar Box Lumber, n.w cor. Third and Wood streets.

CHEESE MANUFACTURERS.

HALLER, B. & CO., Importers and Dealers in Schweitzer and Limberger Cheese French Mustard, Herrings, Sardines, &c., 35 w. Court street.

CHINA, GLASS, &c.

WEST, H. F., BROS. & Co., China, Glass, & Queensware, 139 w. Fourth, and n. w. c. Pearl & Walnut. See Advertisement.

CIGARS AND TOBACCO.

CAHN, LEE, Imported and fine goods a specialty, 82 W. Fourth street, opposite Pike's Opera House.

PASSAUER, C., Manufacturer and Dealer in Cigars, Tobacco, Pipes, &c., 140 Vine Street.

ROEVER, F., Wholesale and Retail Dealer in Cigars and Tobacco, 113 Walnut.

CIVIL ENGINEERS.

DAVIES, THOMAS, Civil Engineer and Surveyor, 304 Clark Street.

RIDGWAY, T. A., Civil Engineer and Surveyor, 26 Dayton Street.

CLAIRVOYANT.

WARING, DR. PAUL, Clairvoyant and Astrologer, 377 Elm Street.

CLOTHING & CLOTHS.

FECHEIMER, FRENKEL & CO, Wholesale Clothing and Cloth house 107 w Third st

GRABFIELD, P. H. & CO, Clothiers, 80 west Pearl street.

GREVER, TANGEMAN & CO, Importers and Jobbers of Fine Woolens, 101 w. Third

HEIDELBACH, FRIEDLANDER & CO Wholesale Clothiers and Jobbers of Woollens, 129 west third street.

HOLBERG, F., Manufacturer and Dealer in Clothing, 158 and 230 w. 5th street.

KLEINE, DETMER & Co., Importers of Cloth, Cassimers &c., 97 w. Third street. See Advertisement.

NEWBURGH, STERN LAUER & CO., Manufacturers of Clothing, Dealers and Jobbers in Woolens, 126 Vine op. Burnet House.

PHŒNIX ONE PRICE CLOTHING HOUSE, and Gent's Furnishing Goods, Henry Kessler, Manager, cor..Race and Elder St.

SEASONGOOD, J. & L. & CO. Mnfrs of Clothing, Importers and Jobbers of Woolens, sw cor Third and Vine streets.

STERN, MAYER & CO, Clothing and Cloth House, n e cor Third and Vine streets.

CLOTHING & CLOTHS (Continued.)

STIX, KROUSE & CO, Wholesale Clothiers 135 Race street, bet Third and Fourth

TROUNSTINE, A. & J. & CO, Wholesale Clothing, Importers and Jobbers of Woolens s e cor. Third and Vine.

VERKAMP, G. H., Men and Boys Clothing, Southeast corner Plum and Fifth streets.

COLLEGES.

GLENDALE FEMALE COLLEGE, Rev. L. D. Potter, D. D., President, Glendale, Hamilton Co., O. See advertisement.

QUEEN CITY COMMERCIAL COLLEGE, Henry A. Faber, President, Apollo Building, N. W. corner 5th and Walnut.

COMMISSION MERCHANTS.

BREITENBACH, J. G. & CO, Commission Merchants, 28 west Front street

BANNING, J. W. & CO., Commission Merchants, Cheese, Butter and Seeds 46 Walnut.

BROOKS, P., Commission Merchant, Foreign and Domestic Fruits, 25 w. Front.

BUCHANAN, ROBINSON & CO., Commission Merchants, Cotton, Peanuts, Dried Fruits, &c., 30 Vine street.

CARTWRIGHT, GARDNER & CO., Consignments Solicited, n. w. cor. Main and Water streets. See advertisement.

CLARK & KENNEDY, General Commission Merchants, 36 Vine street.

COLLORD, MORRISON & CO, Produce Commission Merchants, 34 Walnut st.

COST, R. H. & CO. Commission Merchants, Flour Grain and Mill Feed, 78 & 80 w Front

EARL, LYON & CO, Butter and Produce Commission Merchants, 42 Walnut.

FISHER, J. W. & CO., Grain, Produce and Commission Merchants, 22 Water street.

GOODHART J. H. & CO., Cotton and Commission, 65 and 67 w. Front street.

HERMESCH, J. H., Commission Merchant, and Dealer in Grain, Feed and Produce Generally, No. 19 Water street.

HOPPER & MATHEWS, Wholesale Dealers in Produce Generally, 204 w. 6th street.

JACKSON, GEO. E. & CO., General Commission Merchants, 52 Walnut. See advertisement.

LONGLEY, GARLICK & CO., General Commission Merchants, 49 and 51 w. Front street. See advertisement.

MILLER, A. M. & SON, Produce, Commission Merchants, 97 Walnut street.

MILLER, H. H. & CO. Produce Commission Merchants, Flour, Hay, Seeds, &c, 8 w Front street See Advertisement.

NEWHALL, GALE & CO. Flour & Grain, 86 west Front street

PALMER & CO., Seedsmen and Commission Merchants, 206 w. 6th street.

PERIN & GOULD, Commission Merchants, 88 and 90 west Front street

ROOTS & CO., Commision Merchants and Salt Agents, s. e. cor Front and Vine Sts.

SHEEHAN, PIERCE B., Hay, Grain, Produce, and General Commission Merchant, s. w. cor. Walnut & Water sts. Established 1848.

SHARPLES, GEO. & CO. Cotton Brokers, 69 west Front street

SIBLEY J. W. & CO. Genl Commission Merchants, office & warehouse 40 Walnut st.

STEVENS, S. J. & CO. Commission Merchants, Butter, Cheese, Dried Fruits, &c, 29 Walnut street.

COMMISSION MERCHANTS
(CONTINUED.)

STRAIGHT, DEMING & CO., Commission Merchants, 44 Vine street. See Advertisement.

VICARI & DELSIGNORE, Commission Merchants, 21 west Front street.

WATSON & HEIDRICH, Commission Merchants, 17 west Front street.

CONFECTIONERS.

ECHERT, P. & CO., Manufacturers of French and American Confections, 75 and 77 Walnut.

REINHART & NEWTON, Manufacturing Confectioners and Dealers in Fruits, Nuts, &c., 47 Walnut street.

SMITH, H. D. & CO., Wholesale Confectioners, 56 and 58 Main st. See advertisement.

CONTRACTORS AND BUILDERS.

MACKAY, N., Carpenter and Builder, Hunt street east of Broadway.

ORDERMUNDT, WM., Carpenter, Builder and Contractor, 336 w. 3d st. near Smith. See advertisement.

COTTON MANUFACTURERS.

GOULD, PEARCE & CO., Manufacturers o Carpet Warps, Cotton Yarns, Seamless Bags, &c., 84 w. Second street.

CUTLERY.

WEBER, PHILIP, Manufacturer of Scissors, Sheep Shears, Knives, &c., 16 e. 5th.

DENTISTS.

BERRY, A., Dentist, Laughing Gas used, 95 w. Seventh street.

CAMERON, DR. J. G., Dentist, corner Elm and Seventh streets.

COLTON DENTAL ASSOCIATION ROOMS, C. H. Ware, D.D.S., Superintendent, 162 w. Fourth street.

DAMERON'S, DR. DENTAL ROOMS, Artificial Teeth $10 a Set, 287 w. Sixth St.

DOWNING, H. A., D.D.S., Dental Rooms, 118 w. 6th street. See advertisement.

GRIFFITH, DR. J. M., Dentist, No. 253 Walnut street.

SHEPHERD, DR., G. W. J., Dentist 247 w. Seventh street.

SMITH, DR. S. B., Dentist, No. 287 Vine street.

WOODWARD'S DENTAL ROOMS, 138 w. 6th st. bet. Race and Elm. All styles of Artificial Work known to the Profession, made at this office. Special attention paid to Treatment and Filling of Natural Teeth, on very reasonable terms. Nitrous Oxide Gas used in Extracting, at Fifty Cents per Tooth. W. H. Woodward, D.D.S.

DISTILLERS & WHISKEY DEALERS.

FRANK, M. & CO., Distillers and wholesale Whiskey Dealers, 69 and 71 Main street.

SCHMIDLAPP & CO., Distillers & Wholesale Liquor Dealers, 120, 122, & 124 w. Second street.

STRAUSS, PRITZ & CO., Distillers of Bourbon and Rye Whiskies, 58 w. Second St.

DRAIN PIPE.

ROBSON BROTHERS, Sewer and Water Pipe, Lime, Cement, Plaster Paris, &c., ne cor. Front and Ludlow st. See Advertisement.

DRUGGISTS.

BREHM, LOUIS C. Druggist, se cor Seventh and Carr streets

BAKHAUS, EDMUND, Apothecary, s. w. cor. Freeman and Clark streets.

BEILE, CHARLES F., Apothecary, 139 Bank street.

DANIELS, H. G., Druggist, n. w. cor. Clark and John streets.

FRATZ, JOHN G., Druggist and Apothecary, s.e. cor George and Baymiller streets.

NELMAN CHARLES M., Pharmaceutist, n. e. cor. Findlay and Baymiller streets.

HELMAN, O. A., Druggist and Apothecary, n. e. cor. Sixth and Broadway.

HILL, H. H. & CO., Wholesale Dealers in Drugs, Liquors, Barks, Roots, Herbs, &c. s. e cor Fifth and Race streets.

KLAYER, CHAS. F. & BRO. Pharmacists, n.w. cor. Ninth and Elm, & s.e. cor. John and Clinton.

LIPPERT, OTTO C. F., Apothecary and Druggist, 1009 Central Avenue.

LONGINOTTI, A. J., Druggist and Apothecary, n. e. cor. Plum and Longworth sts. see advertisement.

PELLENS, THEO. P., Apothecary, s. w. cor. Liberty and Denman streets.

PHILLIPS & FLINN, Pharmacists, n. w. cor. Sixth and Lock sts. see advertisement.

POTTS, CHAS. E. & CO., (successors to A.J B. Merriam & Co.) Wholesale Druggists, n. e. cor. Fourth and M in streets.

REAKIRT, HALE & CO., Wholesale Druggists, 99 Walnut street.

VAN SLYCK, CHAS. H., Chemist and Apothecary, n. e. cor. 7th and Elm sts.

WEYER, JOHN, Dealer in Drugs, Medicines, Perfumery, and Toilet Articles, n.e. cor. Sixth and Elm streets.

YORSTON, MATTHEW M., Druggist and Pharmacest, 429 Central Avenue.

DRY GOODS.

ANDREWS, W. H., Dry Goods, 76 and 78 w. Fourth street, and 506, 508, 510 Vine st.

CHAMBERS, STEVENS & CO., Wholesale Dry Goods, Woolens, Notions &c., s. w. cor. Fourth and Race streets.

MCALPIN, POLK & CO, Wholesale Dry Goods & Notions, 108 Pearl & 119 Third st.

SHIPLEY, HOOVER & Co., wholesale Dry Goods, 113 Pearl, cor. Race, retail 139 w. 4th See Advertisement.

STIX, LOUIS & Co., wholesale Dry Goods, s w cor. Third and Race streets. See Advertisement.

ELECTRIC BELTS AND BANDS.

PULVERMACHER GALVANIC CO., Pulvermacher Electric Belts and Bands, cor. Eighth and Vine streets. See Advertisement.

ENAMELED HOLLOW WARE.

QUEEN CITY ENAMELING WORKS, Louis Massman, Proprietor, 72 and 74 Pendleton street.

FANCY GOODS AND TOYS.

KNOST BROTHERS & CO., Importers of Fancy Goods and Toys, 137 w. Fourth st.

STROBEL & WILKEN, Importers of Fancy Goods, Toys, Druggists' Sundries &c. 144 Walnut street.

FERTILIZER.

SMITH, AMOR, & CO., Manufacturers of Fertilizer, cor. John and Poplar streets.

FISH DEALERS.

FICK & CHASE, Oyster and Fruit Packers, Cincinnati branch, 115 w. Six h street.

FINCH, C. C., Dealer in Oysters, Fish, Game &c. 210 w. Sixth street.

FLORIST.

KRESKEN, H., ACROSTA, Florist and Preserver of Natural Flowers, s. w. cor. Eighth and Vine.

FLOORING MILLS.

JOHNSTON, J. & J. M., Flooring Mill and Box Factory, 219 and 221 w. Third street.

LAPE & BROTHER, Queen City Flooring Mill, Mnfrs of Sash, Doors, Frames &c. and dealers in Rough & Dressed Lumber, 481, 483 and 485 Central Avenue.

FLOUR AND FEED.

FAGIN' LEWIS, SONS., Proprs. Epicurean Mill, 29, 31 and 33 Lock st. see advertisement

UNION FEED STORE.
John Luzins, Feed and Flour
at Wholesale and Retail.
S. W. cor. John and Findlay.

FOUNDRIES.

GREENWALD, I. & E., Foundry and Machine Shop, Pearl and Eggleston Ave., office 248 east Pearl street. See Advertisement.

STACEY, GEORGE & CO., Manfrs. Single and Telescopic Gas Holders, Iron Roofs, &c. Foundry 33, 35, 37 and 39, Mill; office 16 Ramsey See Advertisement.

FRAME MANUFACTURER.

NOELCKE, E., Frame Manufacturer and Gilder, 203 Central Avenue.

NURRE, JOSEPH A., Frame Mouldings, Store, 164 Main street, Factory, 276, 278 & 280 Broadway.

FRUITS.

CARTWRIGHT, GARDNER & CO., Consignments Solicited, n. w. cor. Main and Water streets. See Advertisement.

FURNACES.

WITTLINGER, WM., Tinner and Manufacturer of Monitor Warm Air Furnaces. 269 Main street.

FURNITURE.

BETTS STREET FURNITURE CO., Berens, ingemann & Co., 226, & 228 Betts st.

COOLIDGE, J. K. & CO., Mnfrs and Dealers in Furniture, 193 w. Fifth street.

FLICK, FRED, Mnfr and Dealer in Furniture and Chairs, 335 Central Avenue.

FULWEILER, J., Mnfr and Dealer in all kinds of Furniture, 365 Central Avenue.

FURNITURE (Continued.)

HAECKEL, CASPER, Dealer in Office and Library Furniture, s. w. cor Findl y and Central Avenue.

HOFFMANN, VALENTINE, Mnfr & Dealer in Furniture & Chairs, 674 Race st.

HEISEL, D. & P., Mnfrs of Bedsteads and Lounges, &Wood Turners, s.e. cor. Clark & Harriet streets.

KAIPER, CHARLES, Upholsterer, Mnfr & Dealer in Parlor Furniture, 218 w. Pearl st

LIBERTY FURNITURE CO., Mnfrs of all kinds of Furniture, 561 & 563 Race street.

LOEWENSTEIN & ZIMMERMAN Mnfrs & Dealers in Furniture, 128 Sycamore street

MARSHALL, T. H., Furniture New & Second hand Carpets, Bedding &c. 205 w. 5th.

MEADER FURNITURE CO., Mnfrs and Dealer sin Furniture, 135 w. Fourth st.

RENESCH A. & CO., Wood & Marble Top Tables, & Hat Racks, Office & Warerooms, 220 w. Pearl st. Factory cor sixth & Hoadly sts.

SCHNETTE & KRAMPE, Mnfrs of Furniture of all kinds, 1, 3, 5 & 7 Dandridge st.

SCHWARZ J. & CO., Mnfrs of Parlor Furniture, Spring Mattresses, 14 Dudley street.

STRAUS, A. & H., Mnfrs & Dealers in Furniture, 153 w. Fourth st.

GALVANIZED IRON CORNICES.

KIRK & CO., Mnfr of Galvanized Iron Cornices, &c., 241 w. Third street.

GAS FIXTURES & LAMPS.

McHENRY & CO., Lamps, Chandeliers, &c. 6 & 8 e. Fourth, and 162 Main street.

GENTS FURNISHING GOODS.

BAUER, MOSES, Gents Furnishing Goods, Notions & Fancy Goods, s.e. cor. 5th & Vine

GLASS.

HEMINGRAY GLASS CO, Glass Manufacturers, warehouse & office 68 Walnut st

GOLD PEN MANUFACTURER.

HOLLAND, JOHN, Manufacturer of Gold Pens, Cases &c. 19 w. Fourth street.

GROCERS.

BROWN, CHARLES & CO., Wholesale Grocers, 49 w. Second street.

COFFIN, Z. B., Groceries, Teas, Wooden Ware, Carpet Chain &c. 17 w. Fifth street

EVANS, EBENEZER, Dealer in Staple and Fancy Groceries, 170 Broadway.

EVERSMANN, H.H., Dealer in Family Groceries & Produce, 216 Richmond, n. w. cor. Cutter street.

FRAZER, ABNER L. & Co., Wholesale Grocers, 44 Walnut st. See Advertisement.

GREIVING, G. H., Dealer in Fine Groceries, Foreign & Domestic fruits, &c. 205 Elm st.

HACKMANN, JOS., Dealer in Teas, Staple & Fancy Groceries, n.w. cor. Longworth & Stone streets.

HANKS, RICH & CO., Wholesale Grocers, 29 Vine street.

JONES, E. W., Staple & Fancy Groceries, Butter, Flour, &c. n. w. cor. 5th & Stone sts.

PEEBLES, JOS. R. & SONS, Grocers & Importers, Western Branch, n. w. cor. Seventh & Mound streets.

GROCERS (Continued.)

SCHERER, PETER, Dealer in Staple & Fancy Groceries, 602 Central Avenue,

STILES, H. L. Importer of Foreign Fruits & Fine Groceries, 53 Walnut st. See advertisement.

VORNHOLT, G. W., Dealer in Staple & Fancy Groceries, n. w. cor. Richmond and Mound streets.

WARREN, J. T. & Co., Foreign Fruits and Fancy Groceries, 64 w Second, cor. Vine.

WESSLING, G. H. & BRO., Dealer in Family Groceries, 282 w. Sixth street.

WIECHER, H. F., Grocer, n. e. cor. Freeman & Barr streets.

HARDWARE.

CLARK, HOVEY & CO., Wholesale Dealers in Hardware, 51 & 53 Pearl street.

DODT, B. C., Dealer in Builders & General Hardware Cutlery & Tools. 532 Central Avenue.

HUMPHREYS, ALBERT, Hardware, Cutlery, Tin Roofing, House Furnishing Goods, &c. 428 w. Fifth street.

NIEHAUS & MEYER, Importers Wholesale & Retail Dealers in Hardware, Cutlery & Tools, 290 w. Fifth street.

PORTER, W. H. & CO., Manfrs. and Dlrs. in Iron, Nails, Spikes, etc., also W.S.Bolt's Patent Sheet Iron Roofing, 101, 103 and 105 w. Front street. See Advertisement.

SCHRODER LOCK CO., Manfrs. of Locks, Bolts, and Hinges, 16 and 18 east Seventh. See Advertisement.

STITES & CO., Iron Measures, Buckets and Paint Pails, 1590 Eastern Ave., Columbia. See Advertisement.

WAYNE, J. L. Jr., Agt. Undertakers, Upholsterers & Cabinet Materials, 140 & 142 Main street.

HARNESS.

PARK, W. S., Saddle & Harness Manufacturer, 182 Main street.

SCHERZ, JOHN, Manufacturer & Dealer in Harness, Saddles, &c. 275 Freeman street.

HATS AND CAPS.

DANBURY CON. HAT MANUFACTURING CO. Cincinnati Branch, Geo. W. Snyder, Manager, 183 Main st.

HENDLEY, GEO. W. Retail Hats & Caps, 262 west Fifth street.

HEMP, CORDAGE, &C.

DREMAN, HENRY, Mnfr of Hemp Cordage, Sash Cord, Bell Line, &c, 234 Walnut.

HOISTS.

REEDY, H. J. Manfrs. of Reedy's Patent Hand, Steam and Hydraulic Power Hoisting Machines, 128 e. Eighth. See Advertisement.

HOTELS.

ALBION HOTEL, On the American & European plan, J. S. & A. C. Goldtrap, Proprietors, see advertisement.

BEVIS HOUSE, J. B. Frost, Proprietor, s.e. cor. Court & Walnut.

BURNET HOUSE, $3,00, $3,50 and $4,00 per day. Centrally located. First class Hotel in Cincinnati.

HOTELS (Continued.)

CINCINNATI SOUTHERN R. R. HOUSE John Kolfs, Proprictor, s. e. cor. Gest and McClean Avenue

CRAWFORD HOUSE, Lewis Vanden, Proprietor, s. w. cor Sixth and Walnut sts. see advertisement.

GALT HOUSE, Established by W. E. Marsh in 1836. Marsh & Davis, Managers. $1.50 to $2 00 per day, Sixth and Main streets.

LOYAL HOTEL, John Twatchman, Proprietor, s. w. cor. Second and Smith sts.

PEARL DINING ROOMS & HOTEL, A. Birnbryer, Proprietor, 82 Race street.

SHORT LINE HOUSE, W. Adams, Proprietor, 455 and 455 w. Third street.

SLIMERS STOCK YARD HOTEL, Charles Bleichart, Proprietor, n. e cor. John & Livingston streets.

ST JAMES, Griffin & Corbly, Proprietors, Rates, $2.00 and $2.50 per day, Fourth street near Main,

WESTERN HOTEL, A. N. Puttmann, Proprietor, opp. O. & M. R. R. Depot, 468 w. Front street.

INSURANCE.

AMAZON INSURANCE CO. Gazzam Gano, President, 260 and 262 Vine street.

BAUER, GEO., General Agent Germania Life, 14 and 15 Johnston Building.

ENTERPRISE INSURANCE of Cincinnati
Cash Capital Paid up $300,000,00
Assets Jan'y 1, 1878 420,000,00
John W. Hartwell, Prest., Jas. W. McCord, Sec.

NORTHWESTERN MUTUAL LIFE INSURANCE CO., of Milwaukee, Wisconsin, A. P. Hagemeyer, General Agent, 148 w. 4th.

ROYAL INSURANCE CO., John S. Law & Son Managers, s. e. cor. 3d and Walnut.

IRON METALS & PAPER STOCK.

BLOCK & POLLAK, Wholesale Dealers in Junk and Metals, 206 to 226 w. Third street.

JEWELERS.

DUHME & CO., Importers and Manfrs of Watches, Jewelry, &c.sw cor.4th & Walnut See Advertisement.

LOVEL, THOMAS, Importer and Dealer in Jewelry, and Agent for Howard, Waltham and Elgin Watches, n. w. cor. 5th and Race.

STRUEVE, H. R., Watchmaker and Jeweler, 233 Walnut street.

WAHL, A., American and Swiss Watches, Clocks, Jewelry and Plated Ware, 607 w. Eighth street.

LADIES SUITS.

HENDERSON & CO., Ladies Suits, Dresses, Cloaks &c, 237 and 239 w. Fifth street.

LAMPS, COAL OIL, &C.

PETERS, C. H., Dealer in Lamps, Coal Oil, Lamp Trimmings, &c., 241 Vine street.

LAUNDRY.

RACE STREET LAUNDRY, T. F. Kiff, Propr, 229 Race street

LEAD PIPE, SHEET LEAD, &C.

GIBSON, W. & J. B., Manufacturers of Lead Pipe, Sheet Lead, Block Tin Pipe and Solder, 17 and 19 e. 9th st. See advertisement.

LEATHER.

EASTON, SHADFORD, Dealer in Leather, 232 Main street.

ECKERT, MICHAEL Dealer in Leather Findings and Glue, store 228 & 230 Main st. Tannery 884 Central Ave. See Advertisement.

REED BROTHERS & CO., Manufacturers, Importers and Dealers in Leather, 111 Main.

SNODGRASS, W, W. & SONS, Tanners of Harness and Skirting Leather, Store 89 Main street, Tannery Spring Grove Ave.

WOOLLEY, R. & SONS, Manfrs. Fine Harness Leather, dealers in Leather, Shoe Goods, Hides and Oils, 174 & 176 Main street. See Advertisement.

LIGHTNING RODS.

CHAMBERS NATIONAL LIGHTNING PROTECTION CO., Geo. T. Steadman, President, Sole Mfgrs of Chamber's Pat. Lightning Rod and Insulator, Capital Stock $100,000, General Office 199 Race street.

OHIO LIGHTNING ROD WORKS, J. H. Weston, Proprietor, 29 w. Sixth street.

LIME.

MOORES, E., Mnfr of Springfield Lime, Lime and Hydraulic Cement in Bulk or Barrel, 265 Plum street.

LIQUOR DEALERS.

BRACHMANN & MASSARD, Importers & Dealers in Wines and Liquors, 79 and 81 w. Third street. See advertisement.

FIX, AUGUST, Importer and Wholesale Dealer in Wines and Liquors, 341 Plum st.

HOFFHEIMER BROTHERS, Redistillers, Counting Room and Warehouses, 19 and 21 Sycamore st., Distillery on Baum Alley bet. Front and Second streets.

KING, M. J. & CO., Bourbon and Rye Whiskies, cor. Sycamore and Columbia.

JACKSON, J. A. & CO., Wholesale and Retail Liquors and Sample Room, 276 w. Fifth.

PAXTON BROS. & CO., Wholesale Liquor, Tobacco and Cigars Dealers, 32 east Second street.

PFEFFER, JOHN JR., Wholesale Dealer in Bourbon and Rye Whiskies, Imported and Native Wines, s. w. cor. Bank and Coleman sts.

SCHRADER BROTHERS, Wholesale Dealers in Foreign and Domestic LIQUORS, 70 Main street.

WILLIAMS & LAWSON, Wholesale Liquor dealers and sole agents for Harding Smith & Co's Old London Dock Gin, 64 Walnut

YEAGER, LLOYD & CO, Liquor Dealers, 55 west Second street.

LITHOGRAPHERS.

STROBRIDGE & CO., Lithographers and Engravers, 140 Race street.

LIVERY STABLE AND UNDERTAKERS.

ACKERMAN & BUSCH, Undertakers, Texas Livery Stable, cor. Linn and Clark.

BAILEY & BRO., Livery and Sale Stable, 441, 443 and 445 w. Fifth street.

BALLMANN, D. & W., Boarding & Livery Stable, 348 w. Sixth street.

BRISTOL, W. H. Proprietor Empire Livery Boarding and Sale Stables, 276, 278 and 280 Walnut street.

Livery Stable & Undertakers

CONTINUED.

CILLEY, G., Boarding and Livery Stable, 456 Freeman street.

HALENBECK & BRO., Livery, Sale and Boarding Stable, 212 Everett street.

HESSE, WM., Livery, Boarding and Sale Stable, 181 Elm street, bet. 4th and 5th.

MERCHANTS ACCOMMODATION STABLE, 40, 42 & 44 Race street, H. A. Pape, Proprietor.

SEEBAUM, RUDOLPH, Buckeye Stables, 16, 18 and 20 w. Seventh street.

SIEFKE, FRANK, Livery, Boarding and Sale Stable, n. w. cor. 8th and Linn streets.

WISCHMEYER & NILLING, Buckeye Livery and Boarding Stable, 27 & 29 9th.

LOCKSMITH & BELL HANGERS.

CLARK, J. C., Locksmith and Bell Hanger, 217 Elm street.

LEE, ROBT., Locksmith and Bell Hanger, Manufacturer of Locks and Brass Axle Pulleys, Burglar Alarm Bolts, &c., Speaking Tubes put up and Models Built. All kinds of Repairing, 307 w. 6th st. bet. John and Smith.

SCHRODER LOCK CO., Manfrs of Locks, Bolts & Hinges, 16 & 18 e. Seventh. See Advertisement.

LUMBER.

DOPPES, J. B., Building Lumber, Lath, Shingles and Tennessee Red Cedar, also Sash, Doors & Blinds, n. w. cor. 8th & Baymiller.

GILPIN, THOMAS & CO., Lumber Dealers Office and Yard, S. E. Cor. Twelfth and Plum sts.

JOHNSTON, J. & J. M., Wholesale & Retail Lumber Dealers, 159 Freeman Ave.

MILLS, SPELLMIRE & CO., Dealers in Lumber, Doors, Sash and Blinds, 372 w. 3d.

TOWNLEY, WM. E. & CO, Lumber, 133, Freeman cor. George street.

WELLS & CASSEDY, Wholesale and Retail Dealers in Lumber, Office and Yard, n. w. cor. Everett and Baymiller streets.

MACHINISTS.

LINK, VAL., Machinist, Friezing and Moulding Bits and Small Machinery, Repairer of all kinds of Wringers, 598 Walnut st.

PASSE, ERNST, Practical Machinist and Millwright, s. e. cor. Second and Central Ave. See advertisement.

SCHULTZ, M., All kinds of Machinery made to order, 170 Plum street.

MANTELS AND GRATES.

EUREKA CO-OPERATIVE FOUNDRY ASSOCIATION, Manufacturers of Marbleized Iron Mantels and Grates, 123, 125, 127, & 129 Gest street. See advertisement.

PERKINS, WM. L. & CO., Manufacturers of Mantels and Grates, 94 & 96 Elm street.

MARBLE WORKS.

WHITE, ALFRED, American and Foreign Monuments, 251, 253, 255 & 257 w. Fifth street. See advertisement.

MATTRESS & BEDDING.

GEIS, ADAM, Wholesale & Retail Mattress & Bedding Manufacturer, 67 w Fifth st.

MEAT MARKETS.

HUTTENBAUER, S., Fresh and Smoked Meats, Tongues, Sausages, &c., s. w. cor. Seventh and Walnut.

SEIBEL, FRED., Dealer in Meats, Game, Fruits, &c., 182 & 184 w. Sixth street.

MERCANTILE AGENCY.

BRADSTREET, THE J. M. SON & CO., Improved Mercantile Agency, 78 & 80 w. 3.

MILLERS.

GREENWALD & SCHOTT, Proprietors White Cloud Mills, 264 Broadway. See advertisement.

MILLINERY.

DEVOU & CO., Imps and Mnfr Millinery at Wholesale Only, 137 & 139 Race street.

NELSON, BENJ. Millinery & Straw Goods, 62 west Fifth street.

SMITH, JAS. D. & CO., Wholesale Millinery, 138 Race st.

MILL STONES.

BRADFORD MILL CO., French Buhr Mill Stones, Smut Machines, &c., 158 w. Second

MODELS.

SCHRADER J. A., Mnfr of Patent Office Models, Light Machinery Models &c., n. w. cor. Race and Fifteenth streets.

MUSIC HOUSE.

CHURCH, JOHN & CO., Publishers of Sheet Music and Music Books, and Dealers in Pianos and Organs, 66 w. 4th. See avertisemen on Map.

MURCH, C. M., Pianos for Sale or Rent at the Piano Arcade, 278 & 280 w. Sixth st.

SQUIRE, A., Importer and Manufacturer of Musical Instruments, 216 Elm street.

WILLIAMS & MANSS, American and Foreign Music Books and Musical Merchandise, 74 w. Fourth street.

NAVAL STORES.

LONGLEY, GARLICK, Dealers in Naval Stores, 49 & 51 w. Front. See advertisement.

NOTIONS.

BOHM, BROS. & CO., Imps & Dlrs in Men's Furnishing Goods, Shawls, &c., n. e. cor. Third and Race.

BRIGEL, JOSEPH A. & CO., Wholesale Notions and Furnishing Goods, 130 w. 3d.

WALD, LEWIS & CO., Imps. & Jobbers in Notions, Hosiery and Furnishing Goods, 137 & 139 w. Third street.

NOVELTIES.

BUCKEYE NOVELTY CO., Wholesale Dealers in Patent Novelties, Cheap Jewelry, Stationery, Puzzles, Sewing Machine Attachments and Manufacturers of the Buckeye Stationery Package, 29 Emery Arcade.

OCULIST & AURIST.

HAZLETT, W. L., M.D., Oculist & Aurist, 164 Central Avenue.

OILS.

BURCKHARDT & CO., Manufacturers of Lard Oil and Stearine, 101 Sycamore

LITMER, C. & CO., Mnfrs of Lard Oil, s. w. cor. Sycamore & Hunt. See advertisment.

MCDONALD, ALEX. & CO., Oils, Starch and Naval Stores, 57 Walnut street.

WHETSTONE & CO., Mnfrs of Linseed Oil, cor Eighth & Eggleston Avenue.

OPTICIANS.

FOSTER, JAS. JR. & CO., Mnfrs of Optical, Mathematical & Philosophical Instruments, 80 w. Fourth street.

SPETH, F., Optician, Hydrometers, Acidometers, &c. 249 Walnut.

WAGNER, FERD., Practical Optician, 41 w. Fifth street, Johnston Building,

OYSTER & FRUIT PACKERS.

FICK & CHASE, Dealers in Oysters, Fish, Game, Fruit, &c., 115 w. Sixth street.

PORK PACKERS.

ANDEREGG & ROTH, Pork & Beef Packers, 321 & 323 Freeman. See advertisement.

DAVIS, CHARLES & CO., Pork Packers, Extra Family Hams & Breakfast Bacon, n. w. cor. Sycamore and Eighth.

DAVIS, GEORGE F. & CO., Pork & Beef Packers & Curers of the Star Brand Hams, n. e. cor. Court & Broadway.

DAVIS, S. JR. & CO., Beef & Pork Packers, Curers of Diamond Brand Hams, 303 to 313 Broadway, s. w. court.

DAVIS, WM. H. & CO., Commission Pork Packers, Ham Curers & General Warehousemen, 271 & 273 Sycamore street.

JACOB, CHAS. JR. & CO., Pork and Beef Packers, 64 w. Second cor. Vine.

PHIPPS, GARDNER & CO., Provision Dealers & Curers of the Pine Apple Brand Extra Sugar Cured Hams, n. w. cor. Ninth and Broadway.

PAINTERS.

GRAINGER, C. H., House, Sign and Ornamental Painter, Ceilings Whitened & Wall Paper Varnished, 172 Freeman street.

HOLLIDAY, JAMES G., House and Sign Painter, n. e cor. Elm and Canal streets.

MAULE, D., House & Sign Painter, & Dealer in Paints, Varnishes, &c., 731 Freeman.

MCDONALD & CANN, House and Sign Painters, 112 George street.

PRICE, M. D. & CO., House and Sign Painters, 10 w. Third street.

PAINTS, OILS, GLASS, &C.

BERNE, W. J., White Lead, Zinc, Oils, Window Glass, Brushes, &c., 191 w. 5th st.

LONG, CLEMENTS & DRURY, Colors, Dry and in Oil, 171 Race street.

LYONS ASBESTOS PAINT CO., 174 e. Fifth street.

PEALE, W. C. & BRO., Mnfrs of Pure White Lead, Putty & Colors, 332 & 334 Central Ave.

PAPER MANUFACTURERS AND DEALERS.

CHATFIELD & WOODS, Mnfrs and Wholesale Paper Dealers, 25 w Fourth street.

SNIDER'S LOUIS SONS, Paper Manfrs. & Dealers, 121 Walnut st. See Avertisement.

STEWART, CHARLES, Mnfr and Wholesale Dealer in paper, 143 Walnut street. See advertisement.

PAPER HANGINGS.

HENDRICKS, J. H., Dealer in Paper Hangings, Window Shades, Pictures, &c., 494 Main street.

HOLMES, S. & CO., Dealers in Paper Hangings & Window Shades, 144 w. Fourth st.

MAYBERY BROTHERS, Agency New Brunswick Wall Paper Co., 171 Main st., Latest Designs at Lowest Prices.

PETER, GEO. A., Paper Hanging, Window Shades, Oil Cloths & Wether Strips, 123, w. 5.

VOIGHT, L., Importer and Dealer in Paper Hanging, Window Shades &c. 205 Cen. Av.

VOIGHT, WM. L., Importer and Dealer in Wall Paper, Window Shades, Table Oil Cloth, Cord, Tassels, &c., 166 Walnut st. See advertisement.

PATENT MEDICINES.

PARK, JOHN D. & SONS, Proprietary Medicines, 177 Sycamore street.

PATTERN MAKERS.

ARMACOST, E. W., Patern Maker, cor. Third & Lock streets.

PENS.

HOLLAND, JOHN Mnfrs. of Gold Pens and Holders, Propelling Pencils, Gold Tooth Picks, etc., Manufactory and salesroom 19 w 4th See Avertisement.

PERFORATED METALS.

SMITH, THOS. S., Iron & Steel Perforating, 137, 139, & 141 e. Pearl. See advertisement.

PHOTOGRAPHERS.

MUHRMAN, C. H., Landscape and Mercantile Photographer, 401 & 403 w. 3rd st.

PHYSICIANS.

GEISER, S.R. M.D. Homeopathist, 303 Baymiller street.

SLOSSON, Dr. M. H., Homeopathic Physician, n. e. cor. Seventh and John streets.

WERNER, G. C., M. D. 282 McMicken Avenue.

PIANOS & ORGANS.

BALDWIN, D. H. & CO. Pianos & Organs, Decker Bros.' Valley Gem Pianos & Estey Organs, 150 w Fourth & 160 Elm st. see advertisement.

BRITTING & BRO., Mnfrs of Pianos & Organs, & Importers of Musical Instruments, 227 w. Fifth street.

BRITTING, JOHN, Mnfr & Impr of Musical Instruments, Strings, &c. 72, 74, 76 Canal.

LINDEMAN, F., Pianos & Organs, 173 w 4th street.

WEISENBORN, HENRY, Dealer in Pianos & Organs, Musical Instruments &c. 174 Walnut st.

PICTURE FRAMES

HOOVER, J.H. Picture Frames, Stereoscope Views, Photographs, &c. 150 Walnut st.

WISWELL, WM., Fine Art Emporium, 70 w. Fourth str et.

PLANING MILL.

HILL, J. M. & CO., Mnfrs & Dlrs in Sash, Doors, Blinds, Mouldings, &c. 42 Sycamore

ROBINSON, J. W. & T. G., Planing Mill & Box Factory, 123, 125, 127 Carr street, see advertisement.

PLOWS.

BODE & BINDER, Steel Plows, Cultivators, Harrows, Shovel Plows, &c. 697, 699 Central Avenue.

COTTMAN & CO., Mnfr of Rover Steel Plows, 9 w. Seventh street.

PLUMBERS.

GIBSON, JOHN & CO., Plumbers, Gas & Steam Fitters, s. e. cor. Seventh & Main.

GIBSON, THOS. & CO. Plumbers Supplies, 200 Vine street. See Advertisement.

HEWMAN, THOMAS J., Pump and Hydrant Maker, 196 Seventh street.

LYNN, WILLIAM & CO., Plumbers, Gas & Steam Pipe Fitters, 203 Race street, see advertisement.

MURDOCK, J. G. & CO., Plumbers, Gas & Steam Fitters, 195 w. 5th st. Mnfrs of J.G. Murdock's Patent Anti-Freezing Hydrant.

SULLIVAN, D. & SON, Plumbers & Gas Fitters, 210 Central Avenue, see advertisement.

PLUMBERS SUPPLIES.

POWELL, WM. & CO., Dealers in Plumbers Supplies, 245, 247, 249 w. Fifth st., see advertisement.

POTTERY.

DALLAS, FREDERICK, Mnfr of White Granite, & C. C. Goods, also Parian Marble ware, Hamilton Road Pottery, head of Elm.

PUBLISHERS.

SPENCER & CRAIG PRINTING WORKS 169 and 171 Race street.

VAN ANTWERP, BRAGG & CO., Publishers Eclectic Educational Series, 137 Walnut.

PUMPS.

COPE & MAXWELL MNFT'RING CO., Manfrs of Steam Pumps & Boiler Feeder, Office and salesrooms 131 w 2d, wks Hamilton, O. See Advertisement.

RAGS, METALS.

ZIMMERMANN A. & SON, Wholesale Dlr in Rags, Metals, Iron, &c. 84 McMicken Av.

BUGGANER, J., Dlr in Woolen & Cotton Rags, Waste Paper, Old Metal . 4 w. 2nd st.

MOERS, E. M., 20 e. Second st., Dealer in Old & New Metals, & all kinds of Woolen and Paper stock, Correspondence solicited. Established 1854.

RAILWAY SUPPLIES.

POST & Co., Manfrs and dealers in Railway Supplies, Metal and Machinery, 161, 163 and 165 west Pearl, cor. Elm st. See Advertisement.

WHITE, WM, & CO Railroad Oils, Cotton Waste &c, 63 west Front street

RANGES.

VAN JOHN, Mnfr of Vans Pat. Hotel & Family Ranges, &c. Revolving sign, 10 e. 4th st.

RESTAURANT.

KOCH C. L., Grey Eagle Saloon & Boarding House, 640 w. Eighth street.

ROLLING MILLS.

GAYLORD ROLLING MILL CO., make a specialty of Boiler Plate, 81 e. Third st.

ROOFERS.

CALDWELL & CO., Iron Roofing, 130 w. Second street, see advertisement.

DUNN & WITT, Tin, Iron & Slate Roofers & Galvanized Iron Cornice Work, 144 w. 3rd.

HUNTER, JAMES, Tin, Iron & Slate Roofer, Manufacturer of Ornamental Galvanized Iron Cornices, Dormer Windows, Initials, Window Caps, &c. 169 Central Avenue.

QUINN, T. G. & CO., Slate & Tin Roofers, Mnfrs of Galvanized Iron Cornices, Factory 255 w. Third street, bet. John & Central Avenue, see advertisement.

RUBBER GOODS.

BART & HICKCOX, Dealers in India Rubber Goods & Importers of Druggists' Sundries, 96 w. Fourth street.

SADDLES & HARNESS.

BORCHARD, HENRY, Saddle & Harness Maker, 478 Freeman street.

DE CAMP, LEVOY & CO., Wholesale Mnfrs of Saddlery, & Collars, 91, & 93 Main, bet 3rd & Pearl sts., see advertisement.

GROSSMANN, A. & CO., Wholesale Mnfrs of Saddles, Harness &c. 76 Main street.

HATHERAL & PARK, Mnfrs of Saddles & Harness, 822 to 828 w. Front and 647, 649, & 651 Sixth street, see advertisement.

SADDLERY HARDWARE.

BANTLIN, JULIUS J., Saddlery Hardware, 146 Main, one door below Fourth street.

SAFES.

MACNEALE & URBAN, Safe Manufacturers, 170 w Pearl st. See Advertisement.

MOSLER, BAHMANN & Co., Safe Manufacturers, 165 Water st. See Advertisement

SALOONS.

ATLANTIC GARDEN, 245 Vine st., Fred Roos, Proprietor, see advertisement.

BECKSMITH, FRANK, Choice Wines, Beer & Cigars, 317 w. Sixth street.

BOWERS, ST. CHARLES, Wine, Beer and Cigars, s. w. cor. Plum & Seventh streets.

BEYER, ADAM, Boarding, Wein & Lager Beer Saloon, 16 Sycamore street.

BLACKSTONE'S SAMPLE ROOM, Fine Assortment of Liquors & Cigars, 280 w. 5th n. e. cor. 5th and Central Avenue.

BRINKMANN, A., Boarding Saloon, 159 Gest street.

BURGER, VALENTINE, Wine & Beer Saloon, n. e. cor. Hathaway & Baymiller sts.

DE RAAY, GUST, Beer Hall, 442 Freeman street.

DRACH, CHAS., Wine & Lager Beer Saloon, 182 Walnut st. opp. Gibson House, Best Brands of Liquors & Cigars.

SALOONS (Continued.)

ENGELHARD, JOSEPH, Saloon, 466 Central Avenue.

EVERSMANN, PETER, Saloon, Wein Beer, Cigars & Liquors, n. e. cor 5th & Freeman streets,

FERKEL, JACOB Sixth Street Beer Hall & Restaurant, 465 w. Sixth street.

FEUERSTEIN J. N. Wine & Beer Saloon, 216 Central Avenue.

FIRST NATIONAL WINE ROOMS, Lou. Robinson, Proprietor, Maj. Pat. O'Keefe, Manager, n. w. cor. Longworth & Plum sts. Open day and night.

FUGAZZI, MARC, Wine & Beer Saloon, 162 w. Fourth street, Elm street car

GLUCHOWSKI, CAPT. J., Wine & Lager Beer Saloon, n. w. cor. Baymiller & Clark.

GEGHAN, JOHN J., Sample and Billiard Rooms, Open day and night, 157 w. Fifth street.

GREEN HILL HOUSE, Henry Feuerstein, Proprietor, Hunt st. opp. Effluent Pipe st.

GUTHARDT, H. M., Freeman St. House, Wine & Beer Saloon, 311, cor. Freeman & Espanola streets.

HOFFMANN LOUIS, Wine, Beer and Billiard Saloon, s. e. cor. 14th and Central Avenue.

IFFLAND, FRED., Wine & Beer Saloon, 194 Broadway.

JEFFERSON HOUSE, Wine & Beer Saloon, Boarding House, 347 Walnut steet Frederick Becker Proprietor.

KING'S, 187 Vine street, Emery's Arcade Hotel Building, Old Sour Mash, Hand Made Kentucky Whiskies, Fine Imported cigars. Fay & King, Proprietors.

KOLLMER, FRED., Wines, Beer, Liquors & Cigars, s. w. cor. Second & Plum sts.

LACKMAN, JOHN, Wine & Liquor Dealer. & Saloon, 534 w. Sixth street.

OKER, JOSEPH, Boarding House & Saloon, 735 Central Avenue.

"SAZERAC," J. H. Kelley, Proprietor, s. e. cor. Plum & Longworth streets.

SCHMITT, JULES F., Wine & Beer Hall, Sample room attached, s. w. cor. Third and Main streets.

SIEVE, J. H., Wine, Beer & Liquor Saloon, 45 Wood street.

THE BAY HORSE EXCHANGE, Wm. Brothers, Proprietor, 12 e. Fifth street.

WEAVER, LEW., Wine & Beer Saloon, 416 George street, cor. Baymiller.

WEIS, CHARLES, Saloon, Restaurant and Lodging 102 Plum street.

WIDAU, W. F., Wine & Lager Beer Saloon, s. w. cor. Court & John streets.

SAW MANUFACTURERS.

BALDRIDGE, J. W. & CO., Saw Manufacturers, 9 Vine street, see advertisement.

SCALES.

FAIRBANKS, MORSE & CO., Fairbanks' Scales, 139 Walnut st. see advertisement.

SCULPTOR & CARVER.

ALLARD, H., Sculptor in Wood & Marble, Builder of Altars, Church Furniture of every style, 203 Linn st. opp. St Joseph's Church.

SEALING WAX.

LONGLEY, GARLICK & CO., Dealers in Sealing Wax, 49, 51 w. Front street, see advtisement.

SEEDS.

McCULLOUGH'S, J.M, SON Seed Merch'nt Seeds, Grain, Onion sets, Fertilizers, Implements &c. 136 Walnut st. See Advertisement.

PATTERSON BROS. & CO. Dealers in Timothy, Clover, Orchard Blue Grass, &c., orders solicited. 42 Vine street.

WILDER, J. & CO., Seeds, Farm Implements, Fertilizers, Office and Warehouse, 227 Walnut street.

SEWER PIPE.

CLARK & BROS., Mnfrs of Sewer Pipe Flue Linings, Chimney Tops &c., of best quality. 250 Elm street.

SEWING MACHINES.

BRILL, A. J., Dealer in all kinds of New Sewing Machines, Attachments &c., 513 Central Avenue.

DOMESTIC SEWING MACHINE CO. H. C. Pfafflin, Agt, 58 w. Fifth street, see advertisement.

MADDOCK & BENNETT, General Agent "Howe" Sewing Machines, 202 Race, cor. Longworth.

MADDOCK, S. J. Dealer in & repairer of Sewing Machines, 195 Elm st, n.w. cor. 5th

THE SINGER MANUFACTURING CO., P incipal office, 34 Union Square, N. Y. Branch office, 61 w. Fourth st, see advertisement

WOOD'S SPECIAL SEWING MACHINE MANUFACTURING CO. Repairs all Kinds of Sewing Machines, Only Steam Repairing Shop in the west. 11 Home st.

SHIRT MANUFACTURERS.

CLARK, A. J., Shirt Mnfr. & Dlr in Men's Furnishing Goods, s. e. cor. 4th & Walnut.

STUCKENBERG, H. H., Mnfr of Shirts & Shirt Fronts, 443 Central Avenue.

WILSON BROS., Shirt mnfrs & Men's Furnishers, 69 & 71 w. Fourth street.

SIGN WRITERS.

CROSBY, A. B., Gold & Glass Sign Painter, 135 Central Avenue.

FRANKS, S. Scene & Pictorial Sign Painter, 206 Vine st., & 234 Elm st.

SMITH, M. E., Sign Writer, 172 Central Avenue.

SILVER PLATED & BRITANNIA WARE.

HOMAN & CO., Manufacturers of Silver & Nickel Plated Ware, Britannia, Hollow Ware & spoons, 12 & 14 e. Seventh st.

SOAP MANUFACTURERS.

LIDDELL, CHARLES & CO. Mnfrs of Fancy Toilet Soaps. 26, 28, 30, & 32 Freeman st.

SCHOENHALS, CHARLES, Proprietor Cincinnati Soap Co., 897 Central Avenue. see advertisement.

THOMPSON, GEO. & CO., Mnfrs of the Banner Soap, 639 & 641 w. Sixth st. see advertisement.

SPICE MILLS.

CINCINNATI SPICE MILLS, E. J. Wilson, 116 & 118 w. Second st.

SPRING MATTRESSES.

HABERKORN BROS., mnfrs of Mattresses also, Dlrs in Feathers, 580 Main nr Liberty

JENNINGS, JOS. A., mnfr of Spring mattresses, Bedding, etc., Spring Mattresses at $5, $7, $10, & $15, and upwards, Large discount to the trade, Hotel & Steamboat wo k a specialty, Factory & Salesrooms, 250 John st.

STARCH.

ERCKENBRECHER, ANDREW Starch Manufacturer, 12 w Second st. See Advertisement.

THE GEORGE FOX STARCH MANUFACTURING CO. 87 west Second street, Factories, Lockland, O.

STEAMBOAT JOINERS.

EHLER, ELIAS, Steamboat Joiner, & Dealer in Lumber, Planing Mill & Factory, 197, 199, 201 e. Front street.

STEEL SPRINGS.

HIDDEN & LOUNSBERY, Mnfr of Steel Springs for Furniture & Carriages, 100 Main street. see advertisement.

STENCILS & BURNING BRANDS.

SAYRES, JOS. J. Mnfr of Stencils & Burning Brands, 36 w. Fourth st.

STONE WORKS.

MUELLER, JOHN M. Proprietor Buena Vista Excelsior Free Stone Works, Front st. bet. Gas Works & Mill st. see advertisement.

STOVES.

FARWICK, J. H. Stoves & Castings, Tinware, Copper & Sheet Iron Ware, 165 Court

HOROWITZ S. Mnfr & Dealer in Stoves & Tinware, 217 Central Avenue.

PECKOVER, MOORE & CO. Dealers in Stoves, & House Furnishing Goods, s. w. cor. Fifth & Elm st.

PFAU & GUSTETTER, Wholesale & Retail Dlrs in Stoves & Ranges, 217 w. Fifth st.

RESOR, WM., & CO., Stove Manufacturers, s.e.cor. Race & Front st. see advertisement

RITZLER & ART, Wholesale & Retail Dlrs & Mnfrs of Stoves, Tin, Stamped & Japaned Ware, 179 main st.

VON BEHREN H. W., Manfr of Stoves, Hollow Ware &c. s. e. cor. Freeman & Wade sts.

SUMMER RESORT.

WUSTROW, WM. Proprietor Union Shooting Park, Carthage Road near St Bernard Ludlow Grove, P. O. 4½ miles from city. See advertisement.

SURGICAL INSTRUMENTS.

AUTENRIETH, WM., Mnfr of Surgical & Dental Instruments, 71 w. Sixth st.

TAGS, &C.

DENNISON & CO. Tags & Stationers Specialties, Jewelers & Druggists Findings, Paper Boxes, &c, 169 Vine st.

TAILORS.

EBBERS, HENRY, Merchant Tailor and Clother, 288 Fifth & 287 Central Av. Fine Custom Made Clothing, A Large Stock of Fine Imported Goods on Hand. Goods Shipped to all parts of the Country.

FISCHER, GEORGE, The Tailor, 257 Walnut st.

IMTHUN & ZUMBAHLEN, Mnfr & Dealer in Clothing & Merchant Tailor, 274 w. 5th.

LIPPERT, LUDWIG, Merchant Tailor, 171 Plum bet. Fourth & Fifth.

POLL, J. A., Merchant Tailor, my own make Always on hand, 215 Central Ave.

ROSENTHAL, C., Merchant Tailor, Fit Guaranteed, 115 w. Fifth st.

TAILORS' TRIMMINGS.

ENNEKING, F. & H. & CO., Importers & Jobbers of Tailors Trimmings, 145 w. Third.

TANNERS & CURIERS.

BARDES, CHRISTIAN, Tanner & Currier, cor. Stark & Branch sts. e. Mohawk Bridge.

BARDES, LOUIS C., Tanner & Currier, 183 & 185 McMicken Ave.

LANG & WANNER, Mnfr of Superior Oak Tanned, Sole & Harness Leather, 39, 41 & 43 Dunlap st.

RASCHE BROS., Mohawk Tannery, Plum st. near Mohawk Bridge.

TEAS.

MERRYWEATHER, G. N., Wholesale & Retail Dealer in Teas, 119 w. Sixth st.

MUELLER, H. A. Dealer in Imported Teas & Fancy Groceries, 169 Plum cor. Perry.

TELEGRAPH SUPPLIES.

ROGERS, H. D. & CO., Mnfrs & Dealers in Telegraph, Manifold & Burglar Alarm Supplies, 22 w. Fourth st.

TENTS & AWNINGS.

TRAVERS, A. H. & CO., Mnfr Tents & Awnings & Patent Window Shades, 133 Sycamore st.

THREAD.

WILLIMANTIC THREAD Co. cor. Pearl and Race streets. See Advertisement.

TINNERS' SUPPLIES.

HULL, J. E., Manufacturer of Tinner's Tools, Galvanized Iron Cornice Maker's Tools, Squaring Shears, &c., 137 e. Pearl. See adv.

LAWSON F. H. & CO., Tin, Plate, Wire, Copper & Brass, 188 & 190 Main St. See Advertisement.

SELLEW & CO., Tin, Plate, Sheet Iron, &c., 214, 216 & 218 Main st. See Advertisement.

TIN, COPPER & SHEET IRON WORKERS.

BUCHERT, P., Tin, Copper & Sheet Iron Worker, 21 e. Front street.

Tin, Copper and Sheet Iron Workers

CONTINUED.

DAWSON, BENJ., Mnfr Tin & Sheet Iron Ware & Tin Roofing, 209 w. Fifth street.

HONHORST, JOS. & CO., Sheet Iron Workers, Repairing Promptly Attended to, 121 & 123 e. Front street.

SELLEW MANUFACTURING CO., Mnfr of Tin, Zinc and Sheet Iron Ware, n. w. cor. Seventh & Main streets.

TOBACCO.

BODMAN, CHAS. & CO Leaf Tobacco warehouse, 57, 59, 61 and 63 west Front street.

BECKER, JOHN R. & CO., Dealers in Leaf Tobacco, 72 & 74 Walnut street.

BROOKS, WATERFIELD & CO., Globe Leaf Tobacco Warehouse, 95, 97, & 99 Front st. 102, 104 & 106 Water street.

DILLS FREYTAG & CO., Dealers in Domestic & Spanish Leaf Tobacco, 82 w. 2nd.

KROHN, FEISS & CO, Manfrs of Cigars & dlrs in Leaf Tobacco, 161, 163 & 165 w Third

MADDUX BROTHERS, Wholesale Dealers in Tobacco, Coffee, Tea & Cigars, 25 & 27 w. Pearl street. See advertisement.

MALLAY, RICHARD & BRO., Leaf Tobacco Brokers, 115 & 117 w. Front street.

MEYER, HENRY & CO.,
Dealers in Spanish and Seed Leaf
Tobacco and Commission Merchants,
46 w. Front street.

MEYER, C. F. & BRO., Dealers in Domestic & Imported Leaf Tobacco, 42 w. Front.

MORRIS, W. G. Leaf Tobacco Broker, 87 west Front street.

SEAMAN, L. & CO., Dealers in all Kinds of Cigar Leaf Tobacco, 15 Walnut street.

SLEET & ROSE, Wholesale Teas and Tobacco, 14 east Second street.

WEIGHELL, M. V. B., Proprietor Excelsior Tobacco Works, 210 Elm street.

TRUNKS.

COOPER, E, M, & CO, Trunks, Traveling Bags, &c, 164 Walnut street.

FREUDENBERGER, H., Manufacturer of Trunks, Satchels, &c., 107 w. Fifth street.

MCGUIRE, M. A., Mnfr and Wholesale Dealer in Trunks, Valises, Satchels, &c., 172 Walnut street.

SHOLL & KEEN, Trunks, Valises, Railroad Bags, Satchels, Pocket Books, School Bags, &c., 183 Walnut st. 2 doors above Gibson House.

WAGNER, HENRY, Mnfr and Dealer in Trunks, Satchels, Traveling Bags, &c, 95 Walnut & 187 Main st. Trunks made to order & Repairing promptly attended to.

TURNER & ENGRAVER.

NADLER, FERD., Turner of Wood, Horn & Ivory, 460 Main street.

RHEINEKER, MARTIN, Turner, Engraver & Repairer of Billiards, 123 w. Sixth st.

TYPE FOUNDERS.

ALLISON, SMITH & JOHNSON, Type Founders, 168 Vine st. See advertisement.

UMBRELLAS, &C.

KUHN, M. E., Mnfr of Umbrellas, Parasols & Walking Canes, 98 w. Fourth street.

UNDERTAKERS.

LINGERS & MOORMANN, Undertakers, Livery & Boarding Stables, 339 & 341 w. 6.

WERNKE & SCHROER, Livery Stable & Undertakers, 368 & 370 Sycamore st.

WILTSEE, JOHN F., Undertaker, 293 & 295 w. Sixth street.

UNDERTAKERS' SUPPLIES.

WAYNE, J. L. JR., Agt. Undertakers, Upholsters & Cabinet Materials, 140 & 142 Main street.

UPHOLSTERERS' MATERIALS.

HIDDEN & LOUNSBERY, Cabinet Makers' Supplies, 100 Main. See advertisement.

WAYNE, J. L., JR., Agt. Undertakers, Upholsters and Cabinet Materials, 140 & 142 Main street.

VARNISHES.

BERRY BROTHERS, Mnfrs of Varnish, R. B. Ironsides, Agt. 72 Main st. See advertisement.

QUEEN CITY VARNISH CO., Established 1845, 124 w. Second street.

VINEGAR.

ANDRESS & BEYER, Wholesale Dealers and Manufacturer of pure Cider, Wine & Pickling Vinegars, 25 Sycamore street.

MILLER, F. & CO., Vinegar and Cider Depot, also Liquor Dealers, 62 and 64 e. 2d st See Advertisement.

WARE, GEO. C, Vinegar Manufacturer, 257 west Third street. See Advertisement.

WATCHES, CLOCKS, &C.

BOBE. J. B , Watches, Clocks, Jewelry & Silverware, n. w cor. Fifth & Elm.

DORLAND, GARRETT T., Wholesale Dealer in Watches & Jewelry, 48 w. 4th & 159 Walnut street.

NIPPERT, HERMAN, Dealer in Watches, Clocks, Jewelry, &c. 423 Cen. Av. Op. 12.

OSKAMP, JOS., Dealer in Watches, Clocks, Jewelry, &c. 185 Main street.

UNIFORMS.

BENJAMIN, J., Manufacturer of Military, Police and Uniform Caps, 248 w Fifth st.

WHEEL MANUFACTURERS.

ROYER WHEEL CO., Mnfrs of all Kinds of Wheels, 342 w. Third st.

WHISKY.

FREIBERG, J. & A., Wholesale Whisky Dealers 38 main st.

GROTENKEMPER, H. & CO., Distillers Agts. & Wholesale Liquor Dealers, 53 c. 2.

SCHRADER BROS., Wholesale Whisky Dealers, 70 Main st.

WHITE LEAD MANUFACTURERS

ANCHOR WHITE LEAD CO., A. T. Goshorn, President, 272 & 274 Broadway.

EAGLE WHITE LEAD CO., Manfacturers of White Lead, Red Lead, Litharge, Colored Paints, Putty, &c. 20 to 26 Spring st. See advertisement.

WINDOW SHADES.

KIRK, W. J. & E. H., Mnfrs & Dealers in Window Shades, Fixtures Hollands, &c. 176 Walnut st.

WOOD & WILLOW WARE.

CINCINNATI BRACKET CO., Plain & Ornamental Wooden Ware, 15 & 17 w. 6th st.

COMPTON, AULT & CO. Manfrs. Wood & Willow Ware, Cordage &c, ne cor. Walnut and Front, and 30 & 32 Front streets.

KURTZ, W. P., Manufacturer and Dealer in Wood and Willow Ware, the Latest Improved Clothes Wringers, Washing Machines, Step Ladders, Clothes Bars, and other Laundry and House Furnishing Goods, Commodes and Blacking Cases, Wringers Repaired, Repaired Stock for Sale, 129 w. Fifth st. near Race.

DANVILLE BUSINESS DIRECTORY.

BARBER.

SHERLEY, PRESTON, Fashionable Barber & Hair Dresser, Third st.

BLACKSMITHING.

HUDSON, THOS. J. Blacksmithing & Repairing, Agt. for the Schuttler Wagon, 3 st.

BOOTS & SHOES.

TRACY, J. All kinds of Ladies' & Gents' Boots & Shoes made to order, Third st.

COLLEGES.

CENTRE COLLEGE, O. Beatty, President, Danville, Ky. See Advertisement.

DENTISTS.

AYRES, SAMUEL, Dentist, Main street opposite Central National Bank.

GRANT, SAMUEL P. Dentist, Main street over Express Office.

NEWLIN, GEORGE P. Dentist, n. w, cor. Third & Main streets.

DRUGGIST.

McGRORTY, A. S. Druggist, Bookseller & Stationer, Main st.

FURNITURE.

McGRORTY, J. P. Furniture, Spring Beds, Matresses, Chromos, Picturo Frames, Brackets & Undertaking, Metalic Caskets, &c., Main st.

GROCERIES.

MAGUIRE. SAM. F. Groceries, Flour, Provisions, Cigars, Tobacco, &c., Fouth st.

HOTELS.

CENTRAL HOTEL, John P. Thorel, Proprietor, Main st.

CLEMENS HOUSE, Geo. F. Simonds, Proprietor, Court House Square. See Advertisement.

JEWELER.

FLAIG, EDWARD, Jeweler, Repairing, Fine Watches, Clocks, & Jewelry a specialty, Main st.

LUMBER.

BROWN & GOODLOE, Coal, Lumber, Lime, Cement & Plaster, cor. Main & 4th.

MARBLE WORKS.

LARIMER, S. Foreign & American Marble Monuments, Tombstones &c., Main st.

MERCHANT TAILOR.

MARKS & ZUBER, Merchant Tailors, successors to Marks & Lowrie, Main st.

PHOTOGRAPHER.

FOX, EDWARD H. Artist & Photographer, Main st.

PRINTERS & PUBLISHERS.

BOYLE, NICHOLS & STEVENSON, Job Printers, Editors & Publishers of the "Danville Local," n. e. cor. Main & Third.

MARRS & BRUCE, Publishers of the "Kentucky Advocate," Book & Job Printers, Main st.

SEEDS & IMPLEMENTS.

LUCAS, C. H. Seeds, Orchard & Blue Grass a specialty, also Farming Implements, Main st.

STOVES.

HACKNEY & HINMAN, Stoves, Ranges & Tinware, Third st.

UNDERTAKER.

NICHOLS, J. R. Undertaker, Metal & Wooden Caskets, Coffins, &c., Third st.

GEORGETOWN BUSINESS DIRECTORY.

ATTORNEY AT LAW.

LONG, SAMUEL W. Attorney at Law, Main st.

BOOKS & STATIONERY.

STEFFEE, J. H. Postmaster and Dealer in Stationery, Books, &c., Post Office.

CARRIAGES.

McCULLOUGH, P. Carriage Builder, repairing neatly and promptly done, Main st

COLLEGE.

GEORGETOWN COLLEGE, Rev. B. Manly Jr. D. D., President, see advertisement.

DENTIST.

BRYAN, R. K., D. D. S. Dentist, Main st.

DRUGGIST.

HALL & SPEARS, Prescription Druggists, 1 Main st.

DRY GOODS.

RANKINS & WEBB, Dry Goods, Notions and Furnishing Goods, Main st.

SOPER, ROBT. Dry Goods, Notions, Carpets &c., Main st.

FURNITURE.

STEVENSON JOHN M. Undertaker & Dealer in Furniture, Main st.

GRAIN.

PENN, J. M. Grain, Flour, Coal, Agricultural Implements, Main st.

GROCERIES.

EMISON, W. Q. Wholesale and Retail Groceries, Main st.

GAINES, JOHN S. Dealer in fine Groceries and Liquors, 14 Main st.

GODEY, S. & CO. Wholesale and Retail Grocers, Main st.

HUMPHREYS, JOHN R. Staple and Fancy Groceries, Cigar, Tobacco, Liquors, etc. Main st.

STONE, K. Jr. Wholesale and Retail Staple and Fancy Groceries Whiskies, etc. Cross and Main st.

HARDWARE.

ROBERTS, R. E. Hardware, Stoves, Tinware, etc., at Wholesale and Retail, Main treet.

SHERRITT & CLEVELAND, Hardware and Qucensware at Wholesale and Retail, Main st.

HARNESS MANUFACTURER.

BARKLEY, J. L. Manufactsrer and Dealer in Saddles and Harness, Main st.

HERRING, W. B. Practical Horse Boot, Harness and Saddle Maker, Main st.

HOTEL.

GEORGETOWN HOTEL, Craig and Hart, Proprietors, Opposite New Court House, see advertisement.

JEWELRY.

SHEPARD, T. J. & BRO. Jewelers and Watchmakers, Repairing neatly executed. 10 Main st.

LIVERY STABLE.

McCONNELL, L. Livery, Sale, Breakings and Training Stable and Stock Yards, Main st.

NEWSPAPER.

GEORGETOWN TIMES, John A. Bell, Editor and Proprietor, Main and Hamilton sts.

PHOTOGRAPHER.

PHIPPS, W. R. Photographic Artist, Main cor. Hamilton sts.

SEMINARY.

GEORGETOWN FEMALE SEMINARY. Professor J. J. Rucker, Principal, Georgetown, Ky., see advertisement.

TAILOR

ALSTROM, A. G., Merchant Tailor, Main st.

CHAPMAN, B. A. Fashionable Tailor, Main st.

UNDERTAKER.

RANDOL, B. F. Undertaker, Metallic and Wooden Caskets and Cases, Main st.

LEXINGTON BUSINESS DIRECTORY.

BARBER.

JOHNSON & WARE, Barber Shop & Soft Water Bath Rooms, under St. Nicholas Hotel.

BRICKLAYER.

GARNER, WM. C. Bricklayer, 6 e. Main st,

CARRIAGES.

LINDSAY, J. C. Agt. for Louis Cook, Carriage Manfacturer, Fine Carriages for sale at 59 & 61 Main st.

CLOTHING.

BOWNE, H. A. Clothing & Gents Furnishing Goods, 6 w. Main st.

BRADLEY, CASSELL & RANDALL, Clothing & Gents Furnishing Goods, 4 e. Main st.

LOEVENHARTS Clothing House, n.e. cor. Main & Broadway.

WERTS, JOHN H. Mnfr & Dealer in Clothing, Gents Furnishing Goods &c., 31 Main.

COAL.

BOSWORTH & RICHARDSON, Coal Dealers, 46 w. Main st.

COMMISSION.

STOLL & HAMILTON, Storage & Commission Merchants & Dealers in Fine Kentucky Whiskies, Vine and Broadway.

CONFECTIONERY.

HARDESTY, J. H. Confectionery and Restaurant, Meals at all hours, Oysters, Fruits, Cigars, Tobacco &c.. 45 e. Main st.

HOLLENKAMP, JOSEPH, Fine Confections, Fruits, Cigars, &c., 71 e. Main st.

RICHARDSON, G. C. & BRO. Mnfrs and Wholesale Dealers in Confections, 10 Broadway. See Advertisement.

CROCKERY & QUEENSWARE.

HUTCHISON, ISAAC & SON Importers and Dealers in China, Glass and Queensware, Cuttlery and Silverware, Mill & Main

DRY GOODS.

LOGWOOD, THOS. S. Dealer in Dry Goods, Notions, Cheap Jewelry etc. 13 w. Main Also Nicholasville and Somerset, Ky.

SCHOONMAKER, S. A. Dry Goods, Notions, etc., 6 w. Main.

FURNITURE.

ERD & BELL, Successors to F. I. Erd, Furniture Dealers and Undertakers, 26 w Main.

MILWARD & CO. Furniture Dealers and Undertakers, 10 w. Main st.

GUNSMITHS.

BROWER, JOS. Gun and Locksmith, and Bell Hanger, Dealer in Guns, Fishing Tackle and Sporting Material generally, 38 w. Main near Broadway.

MILLS, B. & SON Mnfrs and Dealers in High Class Breech Loading Guns, 55 e. Main st.

HATTER.

RICHARDSON, JOHN B. Fashionable Hatter and Furrier, 41 e. Main st.

HORSESHOER.

CHEVALIER, FRANK Horseshoeing, Plow making and Repairing, Wood and Iron, all work warranted; also Breeder of Pure Poland China Hogs, Short st. opposite Baptist Church.

HOTELS.

LUSBY'S FAYETTE HOUSE, L. & J. H. Lusby, Proprietors, 60, 62 and 64 e. Short. st. See Advertisement.

PHŒNIX HOTEL, C. F. Simonds and Son. Proprietors, Limestone and Main sts. See Advertisement.

ST. NICHOLAS HOTEL, Johnson and Seelbach, Proprietors, Main st, See Advertisement.

JEWELRY & WATCHMAKERS.

CALVERT, THOS. G. Jeweler, 21 e. Main st.

GARNER, GEO. Jeweler and Engraver, 6 e. Main st.

KROESING, A. J. Watchmaker and Jeweler, 49 e. Main st.

LYON, A. K. Watches, Clocks, Jewelry and Silverware, cor. Main and Mill sts.

LIVERY.

BROWN, F. H. Livery and Sale Stable, Hoagland's Old Stand, 108 e. Main st.

TRACY & WILSON'S Livery Sale & Commission Stables, Montague's Old Stand, 91 & 93 e. Main st. See Advertisement.

LUMBER.

HAMM & GASTINEAU, Carpenters and Builders Dealers in Lumber, Short st. near Jefferson.

WILLIAMSON & BRO. Contractors and Builders & Lumber Dealers at Wholesale & Retail, 126 w. Main. See Advertisement.

MARBLE WORKS.

ADAMS, WM. & SONS Importers of Marble and Granite Monuments, Statues, Headstones, 37 Broadway.

MARBLE WORKS (Continued.)

PRUDEN'S MARBLE WORKS, Country work of all kinds neatly executed, west Main near Broadway.

OCULIST & AURIST.

BARKER, DR. A. B. Oculist & Aurist, Treats all affections of the eye and ear. See Advertisement.

PHOTOGRAPHERS.

BROWN, C. M. Photographer, 19 w Main st.

JOHNS & FAUGHT, Photographers 56 e. Main st. See Advertisement.

MULLEN, JAMES, Photographer, Views of C. S. R R., 5 w. Main st.

PLANING MILLS.

ENTERPRISE MILL, F. Bush a d Son, Proprietors, Sash, Doors, Blinds, Flooring, etc. Manfrs, Vine and Lower sts.

WOOD, THOS. & BRO. Lexington Plain-Sash, Doors, Blinds, &c., 21, 23 & 25 Vine, bet. Mill and Broadway.

PRINTING.

TRANSYLVANIA PRINTING & PUBLISHING CO., Job Printing, Book binding and Blank Book Makers. 49 and 51 Main.

SEEDS.

SANDUSKY, H. C. & CO., Wholesale Dealers in Kentucky Blue Grass Seed, 43 to 51 w Short st.

SPEYER & BRO., Hides, Furs. Sheepskins, Wool, &c., Rags, Iron, Brass, Copper, &c. Blue Grass Seed, 22 and 24 s. Broadway.

SEMINARIES.

CHRIST CHURCH SEMINARY, Miss Helen L. Totten, Principal, Maxwell st. See Advertisement.

SAYRE FEMALE INSTITUTE. H. B. McClellan. Principal, Limestone st. See Advertisement.

TAILORS.

ADAMS, R. M. Merchant Tailor, 43 e. Main st.

MANNINI, P. Tailor, Scourer and Repairer, 49 w. Main st.

UPHOLSTERER.

GRAY, SAM'L F. Furniture Upholsterer, 26 w. Main st.

NICHOLASVILLE BUSINESS DIRECTORY.

BOOTS & SHOES.

DOWNING, R. A. Boots, Shoes, and Gents' Furnishing Goods, 7 Main st.

CONFECTIONERY.

FRAZER & WALLACE, Confectionery and Fancy Grocery and Restaurant, Meals at all hours, Main st.

DRY GOODS.

CRUTCHER, J. A. Dry Goods, Notions and Fancy Goods. 11 Main st.

LOGWOOD, THOS. S. Main st.

MASTERS & LOGAN, Dry Goods, Notions, &c., next door to Nat. Bank, Main and Cross sts.

GROCERIES.

SPARKS, T. T. Dealer in Groceries & Coal, and Woodyards, Main st.

HARDWARE.

MURPHY, J. H. & CO. Hardware, Stoves, Tinware &c., 9 Main st

HEMP.

SPARKS, E. R. Mnfr of Double Dressed Hemp and Shorts, Fine and Co rse Tow, & Dealer in Kentucky Undressed Hemp.

LIVERY.

NAVE, J. E. Livery, Sale, Veterinary and Training Stable, s. Main st.

MERCHANT MILL.

ST. NICHOLAS MILLS, J. W. Buky, Proprietor, Mnfr of Fancy Ky. White Wheat Flour.

STOVES & TINWARE.

McMAHON, DENNIS, Mnfr & Dealer in Tinware, Stoves, &c., Main st.

METCALF BROS. Stoves, Tin & Hardware. Lightning Rods, Pumps, &c.. Main st.

SOMERSET BUSINESS DIRECTORY.

DRUGGISTS.

RICHARDSON, J. R. Dr ggist and Dealer in Paints, Oils, Books, Stationery, Groceries, &c., Main st.

ZACHARY, C. A. Druggist and Apothecary. Prescriptions carefully compounded, see advertisement.

DRY GOODS.

LOGWOOD, THOS. S. Main st.

McBEATH & OWENS, Dry Goods, Notions, Groceries, Clothing, Boots, Shoes, &c., Main st. under Owens' Opera House.

GENERAL MERCHANDISE.

BEATTIE & WAIT, Dealers in General Merchandise, Main st.

HARVEY & NEWELL, Tin & Sheet Iron Manfrs of Hardware and Gen'l M'dse, s. side Public Square.

WAIT, G. W. & CO. Dry Goods, Boots, Shoes, China and Glassware, &c. Main st.

GROCERIES.

HANSFORD, J. M. & CO. Groceries, Provisions, Tobacco, Cigars, etc. a specialty. s. side Public Square.

HARDWARE.

SALLEE & BEATIE, Hardware, Stoves, and Farming Implements. Main st.

HARNESS MAKER.

CONANT, M. A. Harness and Saddle Maker, e. side Public Square.

HOTELS.

HICKS HOUSE, Sim Hicks, Proprietor, see Advertisement.

NATIONAL HOTEL, C. Pitman, Proprietor, late of Sublimity Springs, see advertisement.

ZACHARY HOUSE, C. A. Zachary, Proprietor, Good Livery Stable, e. corner Public Square, see advertisement.

NEWSPAPER.

SOMERSET WEEKLY REPORTER, Jos. B. Rucker, Editor and Publisher, Published every Thursday, Subscription, $2.00. Established 1875, see advertisement.

WILLIAMSTOWN.

ATTORNEY AT LAW.

HOGAN, HON. O. P. Main st.

HOGAN, W. N. Attorney at Law, Main st.

DRUGGISTS.

O'HARA, R. H. Drugs, Patent Medicines, Fancy and Toilet Articles, Cigars, etc. Main st.

THEOBALD, N. V. Druggist, Toilet & Fancy Articles, Paints, Oils, Glass, &c., Main st.

DRY GOODS.

KORACH, I. & CO., Dry Goods, Clothing, Boots and Shoes, &c., Main st.

WEBB, J. H. Dealer in Dry Goods, Notions, etc., Main st.

GENERAL MERCHANDISE.

JEFFERS, N. H. Dealer in General Merchandise, Main st.

ZINN, P. T. Dealer in General Merchandise. Main st.

GROCERIES.

WEBB, GEO. N. Dealer in Groceries, Quee sware, Confections, etc., Main st.

HARNESS MAKER.

RIDDELL, J. M. Harness Maker and Sadler, Main st.

HOTELS.

JOHNSON HOUSE, W. C. Johnson, Proprietor, Good Sample Rooms.

PACK'S HOTEL, Mrs. E. J. Pack Proprietor, Main st.

JEWELRY.

CONNER, C. C. Watchmake and Jeweler, Post Office, Main St.

LIVERY STABLE.

LANDRUM, R. W. Livery and Sale Stable, Rear of Court House.

MARBLE WORKS.

SKEELS, JOHN A. Marble Works, Dealer in Monuments, Toombstones, &c. Main st.

MERCHANT MILL.

CUNNINGHAM, D. L. Merchant Flouring and Grist Mill, Wool Carding, etc.,

POST OFFICE.

PORTER, THOMAS S. Postmaster. Main st.

STOVES.

MOUNT, J. W. Stoves, Hardware, Lamps, Burial Cases, etc., Main and Chicago Ave.

WHEELWRIGHT.

McDUFFEE, R. Wheelw ight, Wagon and Agricultural Implement Maker, Main st.

COVINGTON. DAYTON.

BREWER.

LANG, CHAS. & CO. Mnfrs of Lager Beer, also, Maltsters and Dealers in Hops, Lewisburg, see advertisement

CIGARS.

BIENZ, J. F. Wholesale Mnfr of Havana & Domestic Cigars, 338 Scott st.

TAILOR.

BAILER, JOSEPH, Fashionable Merchant Tailor, 420 Scott st.

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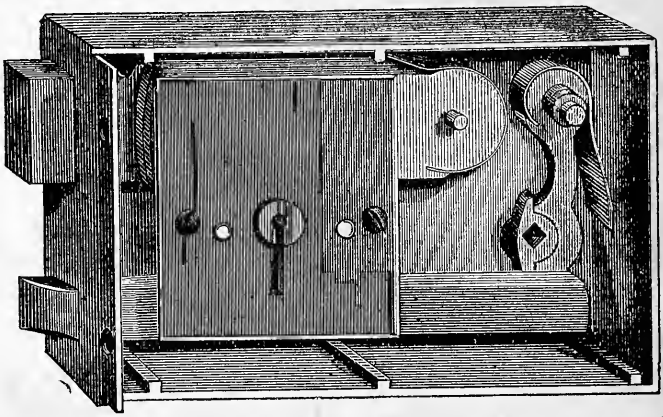

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